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ABSTRACT

Questioning the notion of a sensitive period for second language acquisition, this research examined students' interlanguage development in selected classes at two grades in early, middle, and late French immersion. These classes were administered the same verb tense tests: an oral elicited imitation test and written rational cloze test. Analysis of results indicated that, in general, the aspectual distinction between the "passe compose" and "imparfait" was difficult for all groups of students. Moreover, while students in earlier starting programs significantly outperformed those in later starting programs on the oral task, two groups of students in later starting programs outperformed students in earlier starting programs on the written task. These results suggest that factors related to starting age, including instructional approaches, may have had an effect on students' performance. Interlanguage analysis resulted in a proposed general sequence of development for students' written use of the "passe compose" and "imparfait." (Contains 155 references.) (Author)

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A Comparative Study of the Acquisition of French Verb Tense and Aspect in Early, Middle, and Late French Immersion

Joseph E. Dicks

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Abstract / Résumé

Questioning the notion of a sensitive period for second language acquisition, this research examined students' interlanguage development in selected classes at two grades in Early, Middle, and Late French Immersion. These classes were administered the same verb tense tests: an oral elicited imitation test and written rational cloze test. Analysis of results indicated that, in general, the aspectual distinction between the *passé composé* and *imparfait* was difficult for all groups of students. Moreover, while students in earlier starting programs significantly outperformed those in later starting programs on the oral task, two groups of students in later starting programs outperformed students in earlier starting programs on the written task. These results suggest that factors related to starting age, including instructional approaches, may have had an effect on students' performance. Interlanguage analysis resulted in a proposed general sequence of development for students written use of the *passé composé* and *imparfait*.

◆ ◆ ◆ ◆ ◆

Partant de la question d'une période sensible pour l'acquisition d'une langue seconde, cette recherche a examiné le développement interlangue d'étudiants choisis de trois programmes d'immersion française à deux niveaux. Ces étudiants ont subi les mêmes tests: un test de répétition de phrases et un test de closure écrit. En général, la distinction entre le *passé composé* et l'*imparfait* était difficile pour tous les groupes. L'analyse des résultats indique que les étudiants qui ont commencé à un plus jeune âge ont surpassé ceux qui ont commencé plus tard sur le test oral. Sur le test écrit, cependant, deux groupes d'étudiants de programmes tardifs ont dépassé ceux d'un programme qui a commencé plus tôt. Ces résultats suggèrent que des facteurs reliés à l'âge d'entrée des étudiants auraient pu influencer les résultats. L'analyse interlangue indique une séquence de développement général pour l'usage écrit du *passé composé* et de l'*imparfait*.

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Chapter One

Introduction

Anyone who has attempted to learn a second language (L2) as an adult will usually attest to the fact that it is a long and arduous process. Moreover, *mastery* of a L2 during adulthood is for many an extremely elusive goal. Conversely, adults are generally amazed by the ease and speed with which young children are able to achieve a natural fluency in a new language. The initial rapid gains perceived by parents of immigrant children in natural settings and by parents and teachers of non-francophone students in Canadian French immersion programs are two examples of this phenomenon.

While informal observations tend to suggest that the overriding principle for language learning should be "the younger the better", second language acquisition (SLA) theorists and researchers have sought to determine scientifically if this is true in all contexts, particularly in the context of classroom instruction. In the past, the theoretical debate surrounding SLA in instructional settings has largely focused on the identification of *the optimal age* to begin to learn a second language. More recently, however, the age issue has become much more complex, and instead of attempting to determine one optimal age to begin to learn a second language, researchers have examined age as one variable in addition to such factors as first language literacy, instructional time and methods, and the sorts of language tasks used to assess students' second language competence. Consequently, the notion of a less rigidly defined *sensitive period* for SLA has been proposed. This *sensitive period* concept is discussed in some detail in Chapter Two.

In general, SLA research may be seen to be directed toward two interrelated issues. On the one hand, researchers are interested in studying the **rate** of SLA – whether or not language is acquired more efficiently at one age or another, or the **ultimate attainment** of second language learners – the degree to which they are able to achieve native-like mastery of the L2. On the other hand, researchers are concerned with the **route** or the process of second language development and whether this process follows a natural sequence similar to that for the first language (L1). However, while the rate/route dichotomy may be useful in isolating the focus of SLA research, these two issues are not mutually exclusive. On the contrary, the route of SLA acquisition may be seen to be a key factor contributing to the rate of acquisition. For example, whether one acquires a L2 in a natural environment (similar to the L1) or in a more controlled instructional setting may have a direct effect on how effectively and how quickly one acquires that language.

SLA theorists have advanced a large number of arguments regarding both the rate and route of acquisition – some that favour younger learners and others that advantage older learners. At one extreme, it is argued that SLA is determined by purely innate, developmental processes which are impervious to environmental influences. At the opposite extreme, it is maintained that SLA is uniquely a result of environmental forces such as the type of language input and the amount and intensity of exposure to the second language. Between these two poles, there are those who attribute varying degrees of importance to one side or the other of the nature-nurture continuum.

The question of whether younger or older learners are more efficient in acquiring a L2 involves an examination of the two aspects of language development defined above: rate of acquisition and ultimate attainment. The rate of acquisition, particularly as it relates to students' development of the French verb system, is examined in this study. The issue of ultimate attainment is discussed but no definitive conclusions are possible since the students involved are only at grade 6 and grade 8.

Research from first language acquisition has shown that children learning their mother tongue follow a highly predictable route in the acquisition of a range of grammatical morphemes (Brown, 1973) and structures such as negatives and interrogatives (Klima & Bellugi, 1966). A logical question follows: "Is there a natural route of development for SLA, and if so, what is this route?" In this regard, some SLA researchers have, on the basis of empirical studies, proposed an "order of acquisition" of specific grammatical morphemes (e.g. Dulay, Burt, & Krashen, 1982). However, these claims of an acquisition order are stronger than most would now make, and more recent research has been largely focused on more general developmental sequences. Moreover, within the broad rubric of second language development, one must also consider natural exposure to the language, exposure in classroom instructional settings, and varying degrees of exposure to both situations.

In this study SLA is examined in instructional settings only: three French immersion (FI) program alternatives. It does not account for contact with the L2 (French) outside the school setting. In the educational systems across Canada, FI refers to a variety of programs of instruction designed for non-francophone children which provide an average of 50% or more of daily schooling in French. Students in FI learn the same school subjects as those in the regular English program, but are taught many of these subjects in French. After an initial period of intense exposure to the L2 (up to 100%), the amount of instruction in French is gradually decreased and English instruction is increased. In the Ottawa Board of Education (OBE), where the present study was conducted, there are three FI program alternatives with three different entry points: Early total French Immersion (EFI) beginning at Kindergarten, Middle total French Immersion (MFI) beginning at grade 4, and Late total French Immersion (LFI) beginning at grade 6.

Students in each of the three FI programs receive intense exposure to French upon entry, but the degree of intensity (see **Figure 1**) and the total number of cumulative hours (see **Table 1**) vary considerably from one program to another.

Figure 1
Degree of Intense Exposure to French Expressed as a Percentage of Instructional Time by Grade Level in LFI, MFI, and EFI

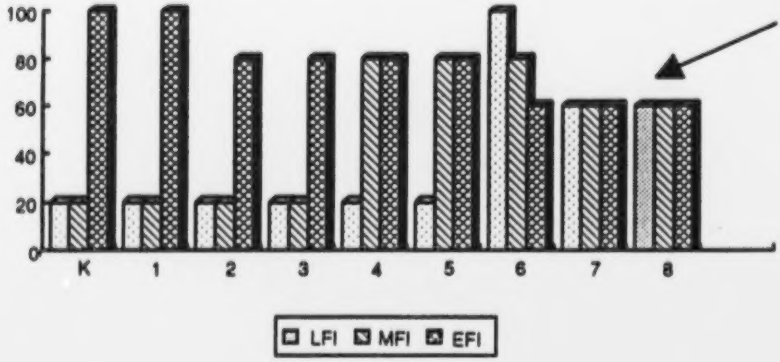


Table 1
Cumulative Hours of Instruction in French from Grades K-6, K-8, and 7-8 in LFI, MFI, and EFI

Grade	**Cumulative Hours of Instruction by Program**		
	LFI	**MFI**	**EFI**
K-Gr.6	1590	2610	4680
K-Gr.8	2490	3510	5580
Gr.7-8	**900**	**900**	**900**

In EFI, students are exposed to French for 100% of the day from Kindergarten to grade 3. MFI students spend 80% of their school day in classes conducted in French from grade 4 (the entry year) until grade 6. For LFI students, the initial year involves 100% exposure to French. Later, however, during grades 7 and 8 students in all three programs receive identical amounts of exposure to

French (60% of the school day). It should also be noted that the total amount of instructional time for MFI and LFI students includes core French prior to entering the FI program, consisting of one 40 minute period of French per day. While these program definitions are specific to the OBE, the starting ages and total cumulative hours of exposure to French in total FI programs are similar in a large number of school boards across Canada.

Given the relatively wide discrepancies in starting ages in various FI program alternatives (5 years old in EFI, 9 years old in MFI, and 11 years old in LFI), SLA research surrounding FI programs has largely focused on the age at which initial intensive exposure to the second language is most beneficial. As noted above, the issue of efficiency of language acquisition is also closely tied to that of the process of SLA. With respect to FI, particularly the early starting EFI program, it has been argued that despite being in an instructional environment, learners acquire the second language in a naturalistic manner without recourse to formal learning of grammatical rules or vocabulary. In the late starting LFI program, however, formal language learning is generally perceived to play a more important role in the SLA process. An exploratory study concerning methodological practices in FI programs was conducted in the context of this thesis (Dicks, 1992). The results of this preliminary study suggest that, for the classes and students studied, methodological practices differed from one program type to another with teachers in LFI classes employing more analytic or form-focused techniques and those in EFI, more experiential naturalistic language use techniques. MFI teachers tended to use both sorts of techniques to a similar extent. (See Chapter Two.)

This study involves a specific focus on students' acquisition of basic verb tenses of French in EFI, MFI, and LFI. Essentially, there are three fundamental questions which direct this research. First, are earlier starting programs more effective than later starting programs with respect to acquisition of the French verb system? Second, does the rate or route of SLA vary depending upon whether students follow an earlier or a later starting program? Third, if there are differences in the rate or route of SLA, do the perceived differences in the treatment that students receive in the three programs combined with factors such as varying starting age, cognitive ability, L1 literacy, and L2 fluency help explain any such differences ?

To answer the first two questions, students were required to complete two specific tasks designed to measure use of the présent, passé composé, imparfait, and futur tenses of French. The first of these is an oral "elicited imitation" task which requires students to repeat a series of sentences which are too long to be memorized. The time constraints associated with this task and the extent to which students must focus on meaning resemble those of naturalistic language use. The second, a written "rational cloze" task, provides a measure of students' knowledge of grammatical rules of the French verb system and their ability to access and apply those rules. The distinctions between the two instruments – both in terms of oral versus written language and focus on message as opposed to language form – are extremely important and are discussed in detail later. The third question, whether or not there are methodological differences among the programs, was addressed by observations and analyses of French language arts lessons in the classrooms involved in the study.

In Chapter Two, literature relevant to SLA in both natural and instructional settings is reviewed and the research hypotheses are presented. In Chapter Three the research design including subjects, instruments, data collection, and data analysis is presented. The results of the research are presented in Chapter Four, and the summary and conclusion of the study are found in Chapter Five.

Chapter Two

Review of the Literature

In this chapter theoretical arguments and empirical evidence related to age and second language acquisition are reviewed with specific emphasis on verb tense use. The results of a recent study involving observations of pedagogical practices in L2 classrooms are also presented. The chapter concludes with a discussion of the research issues and hypotheses.

In a first section the issue of a sensitive period for SLA is examined both from a theoretical perspective and with respect to empirical studies on the speed at which learners acquire the L2 (rate of acquisition), and the highest level of competence that L2 learners are able to reach (ultimate attainment). The fundamental question here is whether or not there is a particular starting age or an identifiable period for language acquisition during which the process is more efficient. In a second section of this chapter theoretical and empirical arguments related to the route of SLA are discussed. The focus in this section changes from a primary concern with the efficiency of language acquisition to a concern with the developmental process. A major issue involves identifying stages through which learners pass while acquiring a L2, and determining if there are similar stages in naturalistic and instructional settings. In a third section an exploratory study of classroom methodology in French immersion (Dicks, 1992), conducted in the context of this larger research, is presented. The results of this study of teaching and learning activities in a specific instructional setting provide a basis for the research issues and hypotheses which conclude this chapter.

A SENSITIVE PERIOD FOR SECOND LANGUAGE ACQUISITION

Theoretical Positions

Defining the Sensitive Period Concept

As noted earlier, a large number of SLA theorists have been preoccupied by the question of whether there is a starting age or identifiable period for which SLA is most efficient in terms of either the rate of acquisition or ultimate attainment in the L2. In SLA literature, this is referred to as the *critical period* or *sensitive period.* While these two terms are often used interchangeably, there is an important distinction between them. Singleton (1989, p.38) defines critical period in the following way: " 'Critical period' is the term used in biology to refer to a limited phase in the development of an organism during which a particular activity or competency must be acquired if it is to be incorporated into the behaviour of that organism". De Villiers and De Villiers (1978, p.210) cited in Singleton (1989, p.38) provide this illustrative example:

> For example, shortly after hatching, the young of Mallard ducks will follow the first moving object they see. It is usually the mother duck, but in her absence they might become attached to a bird of another species, a prying human naturalist, or as unlikely a parent as a colored balloon. The following behavior only occurs within a certain period after hatching, after which point the ducklings develop a fear of strange objects and retreat instead of following. Within these time limits is the "critical period" for th[illegible]llowing behavior.

A critical period defined in these terms is characterized by a crucial starting point and termination point. If language acquisition is subject to such a critical period, two hypothetical situations are possible. The first, which Singleton (1989, p.38) refers to as the "strong version of the critical period hypothesis", maintains that the process must begin at the appropriate time; the implication being that, if not, it will not occur. Similarly, once begun, the language acquisition process will not continue beyond the termination point. The second possibility, a weaker version of the critical period hypothesis, is that the closer the commencement of language acquisition is to the onset of the critical period, the more efficient it will be. Similarly, beyond the end of the critical period, language acquisition is still possible, but much less efficient.

This difference between the stronger and weaker versions of the critical period hypothesis is expressed differently by distinguishing between a *sensitive period* and a critical period. Long (1990, p.252), credits Oyama (1979) with emphasizing several crucial issues related to the critical/sensitive period notions. Earlier definitions of critical periods, according to Long, tended to be "strict and narrow: the behavior had to appear in infancy, to be short and abrupt, to have permanent consequences, and to show developmental fixity', i.e., because genetically determined, to be impervious to environmental influences". However, as scientists' understanding of the concept has evolved, less rigorous definitions have been proffered, and the term sensitive period has been used more frequently. Variability, Oyama (1979, p.91) pointed out, is as much an inherent part of biological processes as regularity, and the need felt to recognize this is one reason for the growing preference for the term "sensitive" (over critical) period.

> Indeed, while the terms sensitive period and critical period are used interchangeably throughout most of the ethnological and psychological literature, a growing preference for sensitive period, even among ethnologists (and by Lenneberg in his later writings) reflects the recognition that the changes tend to be both less absolute and less abrupt because they are not genetically determined or developmentally fixed. Sensitive periods, then, are characterized by much more variability than the traditional definitions of critical periods would allow.

This distinction between critical and sensitive periods is particularly relevant to studies of language acquisition, and especially, SLA. Patkowski (1990), argues that, while the age limitation for first language acquisition (FLA) is believed to be absolute, such is not the case for SLA. Thus, sensitive period is a more appropriate term for SLA.

Long (1990) argues that the questions of whether there is an optimal starting age and whether adult learners are less effective than younger learners is extremely complex. Long (1990, p.255) goes on to make the following argument which he calls 'quite radical' but which he claims to be supported by the literature:

> There are sensitive periods governing the ultimate level of first or second language attainment possible in different linguistic domains, not just phonology, with cumulative declines in learning capacity, not a catastrophic one-time loss, and beginning as early as age 6 in many individuals, not at puberty, as is often claimed.

The notion that different areas of language may be subject to different sensitive periods is one that has been expressed elsewhere as a 'multiple critical periods hypothesis' (Lenneberg, 1967; Scovel, 1969; Seliger, 1978). This issue is explored later with specific reference to morphology and syntax.

Evidence for A Sensitive Period in SLA

A fundamental question in SLA involves whether there is evidence for or against sensitive periods. Long (1990) argues that a sensitive period for language learning could be supported simply by examining the behaviour of other animals and other types of human learning. Lenneberg (1967, pp.168-169) wrote "if we look at behavior from a biological point of view, we should be surprised if we did not find critical periods", since development consists of "one long chain of phases in which one or another set of factors is of critical importance". However, Long (1990) refers to two important requirements indicated by Studdert-Kennedy (1985, p.549): "First, unique sensitive periods must be shown, distinct from any general age-related increase or decline in cognitive abilities. Second, the biologically regulated receptivity of the learner must be demonstrated to be specific to linguistic, and not just any, stimuli."

Does the empirical evidence concerning language acquisition and SLA in particular support the existence of a sensitive period?

Regarding L1 learning, an extremely interesting case is that of 'Genie' (Curtiss, 1977), a severely abused child who was totally isolated from about the age of two years. When found, Genie was almost fourteen years old and had no language. According to Long (1990, p.257), Genie "succeeded in *accelerated*, somewhat irregular passage through normal language sequences, but stopped well short of native-like attainment" (original emphasis). Long argues that this and other similar cases demonstrate that when first language learning begins late, ultimate attainment will be incomplete. The rate of development of what was learned was faster in these cases than in normal L1 development, "presumably because of the relatively advanced cognitive development associated with their older starting age" (Long, 1990, p.257). However, the faster rate of learning is not seen to nullify the sensitive period hypothesis which is more concerned with ultimate attainment.

Do these findings also hold for SLA? According to Long, the opinions among SLA researchers on the existence of maturational constraints in non, primary language learning are sharply divided. Some researchers showed what they felt to be clear evidence of maturational constraints—data appearing to show that children but not adults can attain a native-like accent in the L2 (e.g., Johnson & Newport, 1989; Patkowski, 1990; Scovel, 1988; Seliger, 1978). Others thought the data mixed and ambiguous (Hatch, 1983; McLaughlin, 1984; Singleton, 1989). A third group claimed the findings suggested an advantage for older learners and rejected the younger is better notion altogether, even for L2 pronunciation ability (e.g., Ellis, 1986; Genesee, 1988; Neufeld, 1979; Snow, 1983,1987).

Potential Causes for a Sensitive Period

If sensitive periods for SLA do exist, an important question concerns the potential causes of such periods. A review of the literature on the rate and ultimate attainment of SLA indicates that explanations for a sensitive period fall into four main categories: neurological, cognitive, input-based, and affective.

Neurological Arguments

On the basis of clinical studies of recovery from aphasia (the loss of speech after injury or disease causing damage to the dominant brain hemisphere), it was discovered that while adults often were unable to speak their first language (L1) again, children were generally able to recover normally (Penfield & Roberts 1959; Lenneberg, 1967). These researchers argued that both brain hemispheres are equally available for language at the age of two years, but lateralization gradually develops during childhood and at the close of the "critical period" (puberty) the brain loses plasticity and language becomes lateralized in the dominant (usually left) hemisphere.

However, these studies involved the patients' L1 and the relevance of these and subsequent clinical findings to the process of SLA is seen to be extremely limited. The ability of an injured brain to regain lost speech in the first language is not necessarily equivalent to the ability of a healthy brain to acquire a L2 (Genesee, 1978; Jakobovits, 1970; Lamendella, 1977). Moreover, the natural language learning environment present for these recovering patients is not the same learning environment one would find in a L2 classroom where the teacher is usually the only native speaker of the L2 (Harley, 1986).

Long (1990) points out three major problems with these neurological arguments. First, while lateralization is now understood to start prenatally and to be generally complete by age 5, it has been used to explain critical period effects at puberty. Second, these writers maintain that plasticity causes a sudden, one-time loss in SLA abilities, yet, it is a gradual process. Indeed, because this is a gradual process, Lenneberg (1967) and others (Scovel, 1969; Seliger, 1978) proposed a multiple critical periods hypothesis whereby different aspects of language (e.g. pronunciation, syntax) would be affected at different stages. Third, Lenneberg's arguments applied to L1 and not L2 development, Indeed, Lamendella (1977) suggested that since many normal adults can reach high levels of second language competence, it is more logical to speak of a sensitive period rather than critical period in this context.

Cognitive Arguments

While the biological evidence for a critical period for SLA proved to be inconclusive, the concept of a critical period for language learning still remained quite attractive. Consequently, this same notion has also been expressed in several cognitively-based arguments. Several researchers (e.g., Rosansky, 1975; Felix, 1981, 1985; Krashen, 1982) have argued that increased cognitive development is directly linked to decreased language learning ability in adults. All these arguments generally view the period of development that corresponds to Piaget's period of formal operations (Inhelder & Piaget, 1964) as a critical period in SLA. This period, which occurs around puberty, is characterized by the development of a conscious understanding of language as a system, a new-found awareness of differences between the L1 and the L2, and the emergence of problem-solving cognitive structures. These heightened cognitive abilities are seen to work against the adult language learner's natural ability to acquire languages. This purported natural ability would rely upon something like an innate language acquisition device (LAD) or a universal grammar (UG) (Chomsky, 1968). According to Ellis (1986), nativist theories of language acquisition credit every learner with a LAD or UG which direct the process of acquisition. The LAD is considered to contain information about the possible form that the grammar of any language may take. Adults, however, are seen to rely upon general problem-solving abilities either in place of the LAD or UG (Rosansky, 1975) or in competition with them (Felix, 1981,1985). These more general problem solving abilities are seen to lead to slower and less complete second language learning.

Among the most influential arguments concerning formal operations is that of Krashen (1977, 1978, 1981, 1982, 1985) who has proposed the Monitor Model. Krashen distinguishes between "unconscious" language *acquisition* and "conscious" language *learning*. Acquisition occurs in communicative settings where the focus is on content or message rather than on form. Learners acquire language by being exposed to and understanding "comprehensible input" – language which contains structures at a level just beyond their current level of competence. Learning is defined as the "conscious mental representations of linguistic rules" (Krashen, 1978, p.175) and occurs as a consequence of formal language learning situations typically involving error correction and focusing on grammatical rules. For Krashen, acquisition is the key factor in the development of second language proficiency. Learning is restricted to the role of a "Monitor" or editor of linguistic output.

This distinction between acquisition and learning, and in particular, the roles of "comprehensible input" and "the Monitor" are crucial to Krashen's explanation of a critical period for language learning. According to Krashen, with the arrival of the Piagetian stage of formal operations at around twelve years of age, adolescents gain access to the "Monitor". Consequently, adolescents and adults, unlike younger children, are generally able to analyze and revise their output by referring to the pertinent linguistic rule. In this way, adolescents and adults may be able to speak or write the L2 at a level which surpasses their natural ability. This allows them to become engaged in conversations earlier and to obtain more "comprehensible input" which, in turn, will enhance their natural second language acquisition. While this may result in faster initial progress in the L2 by adolescents and adults, in the long run it is the younger learners who are seen to be most advantaged. According to Krashen, older learners possess a much higher "affective filter" which inhibits them from engaging in natural language use and which reduces the amount of "comprehensible input" they receive. Younger learners, while they may be slower in the initial stages of second language acquisition, benefit in the long run since they are consistently exposed to comprehensible input.

Long (1990) notes that the general advantage that older second language learners have over younger learners for the rate of acquisition requires some cognitive explanation. However, Long identifies two major problems with the positions held by Rosansky, Felix, and Krashen. First, there is a lack of agreement regarding the age of onset of formal operations with Piaget specifying 14 or 15 and Ausubel (1968) claiming 10 to 12. Second, Long argues that " a one-time qualitative change such as the onset of formal operations could not account for an incremental loss in ability across linguistic domains from about ages 6-15 which seems to occur, or for a gradual age-related decline within a linguistic domain, e.g., in syntax, from about ages 6-15 (Johnson & Newport, 1989).

Long (1990) also finds fault with Felix's 'competition model'. Recall that Felix (1985) argued that adult learners' general problem solving abilities compete with their natural language learning abilities. Long (1990, p.277) asks "why should adult learners rely on these less efficient means when, according to Felix, they have tried-and-true, perfectly adequate ones (UG) intact"? In general, Long (1990) feels that cognitive factors must be implicated in sensitive period effects at some level, but that, given the lack of any evidence of IQ having an impact on language achievement, that influence is limited.

While Krashen and the other researchers referred to above claim that cognitive abilities work against learners' natural ability to acquire language, others (e.g., Ausubel, 1964; Taylor, 1974; Cummins, 1983; McLaughlin, 1987, 1990) argue that older learners can learn certain aspects of the L2 more efficiently than younger learners. This is because the older, more cognitively mature learner is able to make grammatical generalizations and apply these when appropriate, can transfer first language learning strategies to the L2, and is better able to deal with the abstract nature of language and the cognitively-demanding, context-reduced tasks associated with school settings.

Ausubel (1964) admits that younger language learners may have an advantage over older learners in developing a native-like accent, and in being more flexible in their approaches to learning tasks. However, adults are viewed as being superior to child learners in two main ways. The first involves the learning of vocabulary in the L2. Learning L2 vocabulary for adults is largely a matter of attaching new labels to existing concepts, whereas younger children often have to construct a new concept at the same time. Adults, therefore, are able to learn vocabulary more efficiently. The second way that adults are advantaged relates to their ability to use deductive reasoning to arrive at grammatical generalizations. Children, however, are restricted to less efficient inductive processes. Taylor (1974) takes a stand that is very similar to that of Ausubel, and explains any advantages for younger learners by affective variables. Taylor's arguments in this regard are examined more closely in the upcoming section on affective factors in SLA.

Cummins (1983) distinguishes between cognitive academic language proficiency (CALP) and basic interpersonal communication skills (BICS). CALP involves context-reduced, cognitively demanding communication and is typical of school-based language use situations. BICS, on the other hand, are those skills used in situations that are context-embedded and relatively undemanding cognitively. Singleton (1989) expresses the relevance of Cummins' arguments for SLA and the sensitive period in this way: older second language learners are advantaged in grammatical accuracy in the L2 because of their greater cognitive maturity which interacts with a wider range of experience in more sophisticated, academic uses of their L1.

The last theorist's arguments to be discussed regarding the role of cognition in second language learning are those of McLaughlin (1987, 1990). Since McLaughlin's arguments are largely made in response to those of Krashen (1982), Krashen's position is re-examined here. Singleton (1989, p.187), in discussing Krashen's arguments, notes that "whereas formerly, Krashen linked the onset of formal operations to a decline in second language success, more recently he has been suggesting that it actually advantages the adult, at least in the short run." According to Krashen (1982), adult second language learners use their Monitor to adapt the surface structure of their L1 to the L2. This results in very quick progress, but, more importantly, allows adult learners to interact with native speakers and increase their exposure to what Krashen considers the crucial element in SLA – comprehensible input. Adults' wider world experience and their greater cognitive maturity are seen to be important insofar as they allow adults to make the input they are exposed to more comprehensible. This, according to Krashen, will result in an advantage for adults in the short term, but younger learners will be more successful in terms of ultimate attainment. Like Taylor (1974), Krashen attributes this long-term advantage for younger learners to affective factors. These will be discussed in the upcoming section on affect in SLA.

McLaughlin (1987, 1990) presents a rather different viewpoint. McLaughlin (1990) questions whether one can actually determine if a process involves "conscious" *learning* (in Krashen's terms) or "unconscious" *acquisition* (in Krashen's terms). Drawing upon his own SLA experience, McLaughlin argues that it was often unclear to him whether he was working on the basis of "rule" (conscious learning) or "feel" (unconscious acquisition). In contrast to the "conscious/unconscious" or *learning/acquisition* dichotomies, McLaughlin (1990) proposes a distinction between *controlled* and *automatic* processes. Controlled processes are not learned responses, but rather, require the active attention of the subject and are therefore restricted to one sequence at a time. Automatic processes, on the other hand, are learned responses that develop over time, occur rapidly, and are difficult to suppress. Learning, then, is the process of using controlled processes in the initial stages and transferring that information to long-term memory where automatic processing can occur. Once automatic processes are established, controlled processes are free to be used for higher levels of processing.

According to McLaughlin (1987, p.133), learning a second language is in effect learning a skill and as with other skills, various facets of the task must be practised until they become automatic or routine.

> To learn a second language is to learn a *skill*, because various aspects of the task must be practised and integrated into fluent performance. This requires the automatization of sub-skills. Learning is a *cognitive* process, because it is thought to involve internal representations that regulate and guide performance. In the case of language acquisition, these representations are based on the language system which include procedures for selecting appropriate vocabulary, grammatical rules, and pragmatic conventions governing language use.

McLaughlin (1990, p.621) notes that "controlled processes... are in effect the 'stepping stones' for the development of subsequent automatic processes". When skills are not completely automatic, performance can be improved by giving the learner more time to apply controlled processes.

Instructional Settings and Input-related Arguments

Apart from the neurological and cognitive arguments, certain scholars have proposed that the amount, intensity, and type of instruction that students receive are crucial factors in SLA. Directly related to learning a L2 in instructional settings is the notion of input. Hatch (1977) suggested that young children receive better tuned, linguistically less complex input, providing them with more and clearer samples form which to learn the target language. However, Scarcella and Higa (1982), in keeping with Krashen's (1982) arguments above, showed that younger learners receive 'simpler' input, but older learners receive 'better' (more comprehensible) input because they are better able to negotiate it.

Singleton (1989, p.237) notes that "time 'per se' is widely recognized as a crucial factor in differentiating levels of language proficiency", and argues that "Krashen's 'Input Hypothesis' and indeed all perspectives which foreground the role of input in language learning, by implication, highlight the importance of exposure time."

Carroll (1969) proposed that in formal instructional settings the total amount of time spent learning the L2, not the actual starting age of the learner, is the crucial variable in the acquisition of a L2. Age is important only insofar as the younger one begins, the more time one has over the course of the school career to acquire the L2. To this extent, an early start is seen as beneficial.

Genesee (1978, p.153) argues that although older learners are more efficient, younger learners will be advantaged over the long term because beginning at Kindergarten combines the "advantages of extended time and opportunities furnished by early instruction...provided that full advantage is taken of them through effective pedagogy".

Swain (1981) notes that younger starting learners have more time and opportunity for spontaneous use of the L2 than do later starting learners, and that this will lead to superior interpersonal communicative skills for the early beginners. However, students who receive intensive exposure to a L2 either early or later are seen to be equally advantaged in the development of academic skills in that L2.

It has also been suggested that older classroom learners, in addition to the knowledge they gain directly from the input, acquire explicit linguistic knowledge through formal instruction and may acquire the L2 at a faster rate than younger learners (Adiv, 1980; Genesee, 1978; Fathman, 1975). This explicit linguistic knowledge may then be made automatic through practice (Stevick, 1980; Bialystok, 1981; Sharwood-Smith, 1981).

Singleton (1989) notes that, given the importance of exposure time, the general principle for instruction should be 'the earlier the better'. However, it is also indicated that in instructional settings, older learners often make initial rapid gains which lead one to believe that later starting programs are equally effective. Also, a paucity of long-term studies of eventual attainment does not allow for conclusive arguments.

Affective, Social and Psychological Factors

Singleton (1989) notes that, for researchers who have adopted a Piagetian stance regarding language learning, affective factors must be considered alongside cognitive factors. Essentially, the affective factors which accompany the onset of the period of formal operations are seen to be negative forces in the language learning process. As noted above, both Taylor (1974) and Krashen

(1982) have claimed that success and failure in SLA can largely be attributed to affective factors. These affective factors include motivation, self-confidence, and anxiety (Krashen, 1982).

According to Krashen, the cognitive changes which occur at puberty (e.g., the ability to think abstractly and to conceptualize the thoughts of others), "affect the strength of the affective filter" (Krashen, 1982, p.216) A high "affective filter" stops input from reaching those areas of the brain that are responsible for language acquisition (Krashen, 1982). Krashen argues that for children this filter is rarely high enough to prevent native-like acquisition of the L2, while for adults it is rarely low enough to allow it.

Long (1990) indicates three problems with the affective filter explanation. First, while children vary in the extent of their self-consciousness, their language development does not (Gregg, 1984). Second, the affective arguments offer no explanation as to why, for example, phonological development appears to be constrained by 6 years of age and syntax much later. Third, exactly what variables contribute to the affective filter and to what degree is not clear (e.g., low self-esteem, self-consciousness).

Singleton (1989) points out that, according to Piagetians, there is a rapid decline in the type of egocentrism which Krashen and others connect with less effective language learning in adulthood. Singleton notes that, a Piagetian psychologist, Elkind (1970, p.70) maintains that egocentrism tends to decline by age 15 or 16, the age at which formal operations is firmly established. Thus, one would expect that the affective filter would be higher in the early teen years than in later teen years, and higher in teenagers than in adults. Singleton (1989) remarks that this is not consistent with the positions taken by Krashen and others.

Taylor (1974) also argues that affective factors play a role in inhibiting SLA. However, as Singleton (1989) points out, Taylor's arguments reflect principles of Freudian rather than Piagetian psychology. While Taylor's and other Freudian explanations do not impose such a rigid 'critical period' as Krashen and other Piagetians, these explanations are quite vague, providing no detailed account of how affective and linguistic factors interact in the process of SLA (Singleton, 1989).

Another position concerning affective variables in SLA involves the distinction between integrative and instrumental motivation. Gardner and Lambert (1972, p.132), in examining learners' motivation for language study, made the following assessment:

> We saw many possible forms the student's orientation could take, two of which we looked at in some detail: an 'instrumental' outlook, reflecting the practical value and advantages of learning a new language, and an 'integrative' outlook, reflecting a sincere and personal interest in the people and culture represented by the other group. It was our hunch that an integrative orientation would sustain better the long-term motivation needed for the very demanding task of second-language learning.

Gardner and Lambert (1972) did find that an integrative orientation was more effective in general. However, in specific situations where learning the L2 is urgent, such as for linguistic minorities in Canada, an instrumental motivation was also found to be effective. This instrumental/integrative distinction may also be seen to be important regarding the age issue in SLA. Children at around age 10 have been found to be more likely to view other cultures as different but interesting, whereas after the age of ten, different becomes associated with bad (Schumann, 1975).

Schumann (1976), proposes that social distance and psychological distance are critical factors in SLA. Social distance refers to such factors as attitudes and expectations of the learners and the target culture group, the relative size and cohesiveness of the two groups, and the degree of similarity between the two cultures. This distance, when more perceived than real, is related to psychological distance: the learners' personal feelings about the target language and culture and their personal motivation. The degree of success of SLA is related to the extent of the social and psychological distance between the L1 and the L2.

Summary

It is clear from the wide range of theoretical positions outlined above that the issue of whether to begin L2 study at a younger or older age is extremely complex. On the one hand, there seems to be a general advantage for younger learners in the long term. However, arguments have also been made which suggest that later starting learners are advantaged in some areas. In order to examine the issue more carefully, empirical evidence related to sensitive periods in SLA in general, and in the context of French immersion programs in particular will be reviewed in the following section.

Empirical Research: Rate of Acquisition and Ultimate Attainment

In the following review of the literature, a series of rate of acquisition and ultimate attainment studies are examined. These include comparisons of students' performance in general second language learning contexts followed by studies conducted in French immersion programs. Since the focus of the present study is morphology and syntax, this review primarily relates to studies of those two aspects of language development.

Rate of Acquisition in SLA

Rate of Acquisition Studies

Fathman (1975) found that for children exposed to English for the same amount of time, older learners were superior to younger ones with respect to tests of productive ability in morphology and syntax. The younger children scored higher on tests of phonology.

Ekstrand (1976) studied over two thousand students of Swedish as a second language between the ages of 8 and 17 over a two year period. He found a steady improvement with age and that older learners outperformed younger learners on a wide range of tasks including listening comprehension, reading, free writing, and speaking.

Snow and Hoefnagel-Hölhle (1978) in a study of second language learners in Holland school and natural language learning situations found that at the end of the first year 8-10 and 12-15 year olds had achieved the best control of Dutch. The 12-15 year olds showed the most rapid acquisition of skills, but the 8-10 year olds closed the gap considerably in the last three months of the first year.

Scarcella and Higa (1981) found in a study of younger and older L2 learners that the younger learners received a large degree of 'comprehensible input' in Krashen's terms which was given in a supportive atmosphere, and with constant checks on the part of the teacher to see that the input was attended to and understood. Despite this, the older learners were better than younger learners in early stages of L2 acquisition. This, according to the authors, is because older learners have to attend very closely to the input and engage in much more active negotiation of meaning which results in the intake of larger quantities of truly comprehensible input.

Morris and Gerstman (1986) compared three groups of children learning Hawaiian as a second language (61 nine year olds, 73 twelve and thirteen year olds, and 48 sixteen year olds). After a twenty minute lesson, the children were given a written test consisting of 14 multiple choice items, 7 sentence unscrambling items, and 7 semantic judgment items. The items were evenly divided among syntactic and semantic, linguistic and metalinguistic, rule learning and rote learning, easy and difficult. The two older groups significantly outperformed the youngest group, and the twelve and thirteen year olds did best overall. These findings are seen to be consistent with others that favour older over younger children for rate of learning.

Collier (1989, pp.512-513), while not directly referring to Cummins' (1983) distinction between CALP and BICS (see section above), juxtaposes "basic second language skills (survival language)" and "context-reduced, cognitively demanding school language". Collier (1989) cites two studies by Cummins (1981 and 1984) to support her position that older learners are more efficient than younger learners on more academic L2 tasks. Cummins (1981) reexamined data from a previous study (Ramsey & Wright, 1974) that appeared to contradict the general pattern that older students are more efficient L2 learners. In the Ramsey and Wright study, immigrant students who arrived in the United States at age 6 and 7 were found to be more advantaged than those who arrived at age 12. However, when the length of residence was statistically controlled, Cummins (1981) found that older students performed better than younger students. Cummins attributed this advantage to the greater cognitive maturity of the older students. Cummins also found that while it took only 2 to 3 years for students to become proficient in basic L2 skills, a period of 5 to 7 years was needed for proficiency in cognitively-demanding school language. In the second study, Cummins (1984) examined the L2 development of Japanese and Vietnamese students in Canada. On L2 academic measures older students significantly ouperformed younger students. On context-embedded measures, however, younger students outperformed older students. Collier (1989, p.517) concludes that "older children (ages 8 to 12) who have had several years of L1 schooling are the most efficient acquirers of L2 school language. Adolescents with solid L1 schooling are equally efficient acquirers of L2 school language, except for pronunciation."

Rate of Acquisition in French Immersion

One related area where there has been further research in the area of rate of acquisition is that of French immersion. The following studies all involve one or another of three French immersion alternatives, early French immersion (EFI) beginning at age 5, middle French immersion (MFI) beginning at age 9, and late French immersion (LFI) beginning at age 11.

Students' general language proficiency is examined first, followed by a specific analysis of verb tense use, the main focus of the present study.

Regarding students' general language proficiency, two key trends may be discerned from comparisons of students' performance in EFI and LFI. First, studies carried out with students in bilingual programs at the secondary level (grade 9 and beyond) suggest that EFI and LFI students are performing similarly on a large number of L2 tasks. Second, where there is an advantage at this stage, it is usually in favour of EFI students on more message-focused, less academic tasks, but not on written, less contextualized academic type tasks.

Pawley (1982) tested students at the grade 10 level from both EFI and LFI programs. The students were asked to write persuasive letters which were rated by a native francophone for several analytic features and a general impression. The only significant difference between the two groups – despite a large difference in total hours of exposure to French – was on "word choice" where the EFI group had higher ratings.

Swain (1981) found that a group of grade 10 LFI students performed as well as grade 8 EFI students on a cloze test, and better than the EFI students on a French listening comprehension test. The EFI students had over twice as much exposure to French as the LFI group. However, on a less academic test of listening comprehension involving taped excerpts from French radio, the EFI students' performance was superior.

Lapkin, Swain, Kamin, and Hanna (1982) conducted a study of the effects of intensity of language exposure on proficiency for two classes in grade 8 LFI differing in exposure to French, and one class in core French at grade 8. The grade 8 LFI class which had received the more intensive exposure to French was the more proficient of the two. The proficiency of both LFI classes was superior to that of the core French class which had twice as many hours of total exposure to French but extended over several years.

Lapkin and Swain (1985) conducted a province-wide evaluation of EFI and LFI programs in New Brunswick for the 1982-83 school year, with specific emphasis on grade 9. The results of the study showed that EFI students were superior to LFI students on the listening comprehension test, but on all the grammatical measures of speaking and writing and the discourse measures there were no significant differences between the EFI and LFI groups.

Research comparing MFI programs with either EFI or LFI alternatives has not been as widespread as comparative studies of EFI and LFI programs. In general, research has focused on students at lower grade levels (grades 6-8) due to the fact that MFI is a more recent program and students have not yet reached the secondary level in most areas. Nonetheless, patterns of performance similar to those found in EFI/LFI comparative studies have been detected.

Lapkin and Swain (1984) compared one MFI grade 6 class in the Toronto Board of Education with two EFI classes. Regarding listening comprehension, there was sometimes a greater difference between the two EFI classes than between the EFI and MFI programs . On measures of speaking, writing, and reading comprehension, no consistent significant differences were found between the classes regardless of program.

Lapkin, Hart, and Swain (1991) report on a comparative evaluation of MFI and EFI programs of the Metropolitan Toronto School Board at grade 8. The MFI classes in this study had received semi-intensive exposure to French (50%) from grade 5 until the time of testing. The authors conclude that, while the strongest MFI class achieved as well as the strongest EFI class on all measures, there was a much wider range of mean scores in MFI, reflecting less consistent performance. (It is important to recognize however that the term "immersion" can be misleading in this case given that it refers to a bilingual 50-50 program).

Parkin, Bonyun, and Unitt (1989) compared the performance of MFI students in the Ottawa Board of Education with EFI students at the grade 6 level using the same measurement instruments used in the Lapkin et al. (1991) study above. EFI students performed better than MFI students on measures of grammatical spelling (morphology), verb tense sequence on spontaneous speaking and free writing tasks, and the cloze test. MFI students were superior to those in EFI with respect to variety of vocabulary. Similar findings were reported in a replication of the study by Unitt and Dionne (1989) for the oral and written verb tense sequence and cloze subtests.

In a further comparative study of the MFI program, McVey, Bonyun, Dicks, and Dionne (1990) found that at grade 6 and grade 8 LFI students made more errors in written verb tense sequence than did MFI students, who in turn made more errors than EFI students. However, at grade 6, while the EFI and LFI groups differed significantly, MFI performance was between that of EFI and LFI, and significantly different from each. At grade 8 while the LFI group was significantly different from EFI and MFI, EFI and MFI did not differ significantly.

The following is a survey of several studies which have explored students' acquisition of the French verb system in various programs, and which clearly indicate that mastery of the French verb system represents a major difficulty for students in different FI programs.

Pellerin and Hammerly (1986) interviewed six students in grade 12 in British Columbia who had been in an EFI program. Common errors of oral speech included oversimplified use of verb tenses.

Swain (1985) in a comparison of FI students at grade 6 with native speaking students found significant differences with respect to grammatical competence. Students tended, for example, to overuse the *passé composé* where the *imparfait* should be used.

The most in depth work on verb tense use in FI programs has been conducted by Harley (1984, 1986, 1992a, 1992b). The following is a review of these studies with a focus on the morphological and syntactical elements of verb use, particularly the *passé composé* and *imparfait*.

Harley (1984) compared the performance of grade 6 EFI students with native speaking French students at the same grade. On an oral interview designed to elicit use of the *imparfait*, *conditionnel*, and *passé composé*, the average score for the EFI group was 57% correct, while the native French speaking students scored 98% correct.

Harley (1986) used an oral interview format (40 questions designed to elicit specific verbs and verb constructions) to compare 12 EFI students at grade 1 and 12 LFI students at Grade 10 who had experienced the same number of hours of instructional exposure to French (1000 hours). The findings indicate similar patterns for both groups with respect to verb tense usage as well as aspectual distinctions between the *imparfait* and the *passé composé*. In the first case, Harley notes a clear pattern of declining accuracy from "Copula > Present stem > *Passé Composé* > *Periphrastic future*. Regarding the aspectual distinction, the older and younger immersion students tended to use the *passé composé* when they used a past tense form, and were similar in that they made minimal progress in marking aspect in the past tense. As noted by Harley (1986), use of the *passé composé* prior to the imparfait has been observed in L1 learners (Grégoire, 1947; Sabeau-Jouannet, 1977) and in L2 French learners in a natural setting (Bautier-Castaing, 1977).

The LFI group demonstrated superiority, however, with respect to number and person distinctions, the use of pronominal verbs, and variety of lexical verb use. Harley interprets these findings in terms of "an interaction of maturational and environmental variables" (1986, p.9). In grade 1 EFI, the focus on natural communication and meaning provides less relevant input for number distinctions than for time which is semantically central to the French verb system. The audiolingual materials and experience with written materials in LFI resulted in a greater frequency of specific grammatical aspects of the verb system in the L2 input. Harley notes that this input was dependent upon the cognitive maturity and L1 literacy experience of the older learners.

Using the same guided interview as in Harley (1986), Harley (1992a) studied the oral proficiency of grade ten students in EFI, LFI, and extended French – 35 students in total. The extended core French students had had forty minutes of core French instruction from grade 4 or earlier until grade 6, followed by twenty-five percent of the day in French in grade 7, and forty percent in the later grades. The mean age of the three groups was fifteen years, ten months at the time of testing. There was also a Francophone control group of twelve students used in the study.

Each student was interviewed for about 30 minutes by a native French speaker and the interview was recorded on cassette. The interview questions were structured to provide contexts for use of the *imparfait*, *passé composé*, *futur*, and *conditionnel* tenses, and other morphological, syntactic, and semantic features. For general use of the future tense, the EFI students were the only group which did not differ significantly from the native speakers. Regarding past time references, all three FSL groups performed similarly, and all were significantly lower than native speakers in appropriate past usage. With reference to the number of formally accurate past tense forms either *imparfait* or *passé composé*, no significant differences were found between the two groups. Regarding the aspectual distinction between the *passé composé* and the *imparfait*, however, EFI students produced significantly more forms in the contexts provided than did LFI or extended core French students. The EFI students were the only group that did not differ from native speakers in this regard. The LFI students produced significantly more *imparfait* forms than did the extended core students, but only slightly so. In an interesting analysis Harley (1992a) shows that while native speakers used the *imparfait* most often to express habitual past actions, EFI students tended to do so much less frequently and most often used the *imparfait* to express the past progressive.

Harley (1992b) examined data from interviews with 36 EFI students (12 at grade 1, 12 at grade 4, and 12 at grade 10), 12 LFI students at grade 10, and 24 native French speaking students (12 at grade 1 and 12 at grade 10). Regarding morphological and syntactic verb development, a number of interesting *passé composé* and *imparfait* analyses are discussed.

Regarding use of the auxiliary verb, Harley notes that grade 1 EFI students were producing this form to mark the past tense on occasion, but not consistently. Moreover, these auxiliary forms, when produced, were not necessarily accompanied by target-like past participles. Grade 1 EFI students tended to rely on the context or adverbs to indicate time distinctions rather than verb tense. This, Harley notes, is a strategy that has also been observed in adult learners in natural SLA contexts (Meisel, 1987).

One common tendency for grade 1 EFI students was to use the first person form of *avoir (j'ai)* as a single unit, not as a marker of past tense, but, rather as the equivalent of the first person pronoun *"je"*. Examples of this, *j'ai crois* in place of *je crois*, *j'ai prends* in place of *je prends* are found in an article by Harley and Swain (1984) who note that a danger in this situation is to interpret the students' productions as examples of attempted *passé composé* usage, when, in fact, the reference is to present time.

Later at grade 4 in EFI, the auxiliary forms *j'ai* and *est* were used most consistently to indicate past time. Examples such as *j'ai allé* and *il est allé* appeared at this level. Harley (1992b, p.173) notes that forms of the auxiliary *avoir*, the more usual auxiliary, tended to be used for all verbs at grade 4 EFI. This pattern, while less frequent, was also seen at grade 10 EFI; e.g., *il a venu dans ma chambre*, and was typical of grade 10 LFI students also.

Harley (1992b) suggests that the difficulties experienced by FI students with *être* and *avoir* may be signs of a pattern of restructuring (McLaughlin, 1990). The restructuring pattern is one where "superficially correct forms appear early, such as *est allé*, may at first be unanalyzed or misanalysed, eventually being replaced as broad new grammatical generalizations are made (Harley, 1992b, p.173). It is noted that this last stage, which is attained when exceptions to general rules are also mastered, is one that eludes many L2 learners.

Harley also notes that use of the *passé composé* is largely restricted to dynamic verbs, and use of the *imparfait* to inherently durative verbs such as *aimer, avoir, être, pouvoir, savoir, vouloir*. These verbs are generally not found in the progressive in English. In grade 1 EFI, there were only isolated cases of such verbs being used in the *imparfait*. In grade 4 EFI, students began to use the *imparfait* with dynamic verbs, "indicating the beginnings of a target-like aspectual contrast with the *passé composé*" (Harley, 1992b, p.174). In grade 10 EFI, the *imparfait* was used much more frequently to indicate past actions in progress, but infrequently to indicate habitual past action. This was in contrast to native speakers. Harley (1992b, p.174) suggests several reasons for the slow development of the *imparfait* in FI. First, there is the problem of homophony. This is illustrated by students' present tense translation of the *imparfait* sentence '*Ils aimaient les pommes*'. The fact that the pronunciation of *aimaient* may be identical or very similar to *aimez* could account for this misinterpretation. Second, use of the *imparfait* is optional in several contexts in French. Finally, the *imparfait*, unlike the English past progressive, is used to reflect both states and actions.

In conclusion, the empirical studies cited above clearly indicate that the French verb system poses major difficulties for students in all French immersion program variants. Moreover, the aspectual distinction between the *imparfait* and *passé composé* is a problem in earlier and later starting programs, as is accuracy of use with respect to these and other verb forms. This is of particular importance as the verb system is considered to be the central element in the structure of a language (cf., Palmer, 1974; Leech 1971).

To conclude the topic of rate of acquisition in French immersion, it seems that older learners (10-12 years of age) initially acquire the L2 faster than younger children, particularly with respect to syntactic and morphological development. It is possible that the advantage found for older learners with respect to syntax and morphology is to some extent a reflection of the nature of the second language instruction these students receive; however, the instructional differences themselves probably respond to the greater cognitive maturity and L1 literacy of older learners. Methods which focus more directly on language form may advantage students with respect to grammatical aspects of language use. In contrast, more message-oriented instruction may produce students who are fluent but inaccurate in their use of language.

Summary

In summary, most of the literature supports the position that adults and older children have an advantage regarding the rate of acquisition of the morphology and syntax of a L2. The issue of whether this advantage persists, and if adults learners are able to achieve ultimate success in the L2 that parallels or surpasses younger learners is the crucial question in this debate. Long (1990, p.265) argues that "Data concerning absolute potential, i.e. whether adults (or child starters, for that matter) can reach native-like levels in a SL, provide the critical evidence for or against the existence of a sensitive period." Consequently, the focus is now directed to an examination of empirical studies which examine the issue of ultimate attainment in the second language.

Ultimate Attainment in SLA

Ultimate Attainment Studies

Patkowski (1982) examined written transcripts of excerpts of spontaneous speech of 67 immigrants to the United States, all non-native speakers of English. Fifteen native speaker controls were also used. The subjects had varying ages on arrival to the U.S., varying lengths of residence., and varying degrees of formal instruction in English as a second language (ESL). The ESL speakers were rated as having from no ability (0) to educated native-like performance (5). Pre-pubescent arrivals (average age on arrival = 8.6 years) performed statistically better than post-pubescent arrivals (average age of arrival = 27.1 years). Long (1990) argues that these results suggest that maturational constraints operate on ultimate attainment in morphology and syntax in SLA, with a clear advantage shown for younger starters. The findings also, according to Long, are consistent with a sensitive period for morphology ending around age 15, but do not preclude ultimate native-like attainment.

Coppieters (1987) used a written questionnaire to elicit grammaticality and semantic judgments in speakers of French as a second language (FSL). All 21 subjects were highly educated and had learned FSL as adults. These questionnaires were followed up by taped interviews where detailed explanations on the judgments were obtained. (Native speaker controls were also used in the study.) Despite being very advanced speakers of French, each non-native subject showed evidence of being a non-native speaker on the grammaticality and semantic judgment tasks. While there was no pre-pubescent comparison group, Coppieters considers the findings to support the notion of a sensitive period for SLA syntactic abilities.

According to Long (1990, p.271) "The least ambiguous evidence to date of maturational constraints operating in the morpho-syntactic domain is that provided by Johnson and Newport (1989). The authors used an aural grammatical judgment task to test the notion of critical period with Chinese and Korean learners of English as second language in the United States. All subjects were adults at the time of taking each test. The age on arrival to the United States varied from age 3 to 37, and the length of residence varied to a similar extent. These two variables were not confounded. Thus, earlier arrivals were students in their late teens or early twenties, while later arrivals were graduate students, research associates, or professors who were generally older. The later arrivals all had had previous formal instruction in English in their native country while this was true for only one of the earlier arrivals. Learners were presented with English sentences which either obeyed or violated grammatical rules. They were asked to indicate which sentences were grammatical and which were not.

In this study, which involved presenting the sentences aurally, learners who had arrived at an earlier age significantly outperformed later arriving learners. Long (1990) argues that the advantage for early over late arrivals was an important finding. However, more important was the finding that for learners who had arrived prior to puberty, scores were inversely related to the age of arrival; earlier arriving learners performed best, and later arriving learners performed least well. For post-pubescent arrivals, the scores were generally low but unrelated to age on arrival. This, according to Long (1990) suggests a sensitive period and not simply a general age effect.

In a follow-up study, Johnson (1992) examined the issues of age of initial intensive exposure, previous formal instruction, and auditory versus written grammatical tasks. This follow-up study is particularly relevant to the present research. Johnson (1992) presented the same series of English sentences to the same subjects one year later, but in written form. Johnson (1992) sought to determine if these same advantages would be found if the sentences were presented in a written form. Johnson notes that there are three features of oral tasks which are unlike those of written tasks. First, there is the transitory nature of oral tasks. Because of the time constraints inherent in processing oral information, it is possible that a learner may know the grammatical rule but may simply be unable to process the incoming speech, and therefore, be unable to recognize a grammatical error. With written tasks, the learner is free to scan the text as often as required without severe time constraints on processing. Second, there is the difficulty of phonetic decoding. Because the learner has to decode phonetic sounds there is an increased processing burden and the potential for mis-hearing what was said. Variations in accents, intonation, or changes in volume could account for such problems. While written tasks require orthographic decoding such variations are largely eliminated. Finally, there is the speed of the oral text. Since these tasks are usually tape-recorded to assure consistency, the subject has no control over the speed at which the incoming information has to be processed. In the case of a written task, the learner can take as much time as needed to read and re-read sentences or parts of sentences before going on.

Related to these differences between auditory and written tasks are what Johnson (1992) refers to as the drawbacks of written materials. The first drawback, according to Johnson, is that formal L2 training in adult learners does not allow one to get at those subjects' implicit knowledge of grammar, or "their usable competence" (p.220). Rather, subjects are able to exploit their "didactically acquired knowledge" (p.220). A second difficulty results from more fluent L2 learners' propensity to use top-down processing strategies. This, according to Johnson, causes these learners to overlook errors or omissions. Essentially, then, written tasks are seen to advantage adult learners, particularly those who have had formal training in the L2. Johnson (1992) remarks that all subjects in the study were academicians who "By their own admission, then, believed that the best representation of their grammatical knowledge would be demonstrated with written materials"(p.221). Johnson comments that her study was designed to provide these subjects "every possible advantage to display their grammatical knowledge" (p.221).

These results are particularly relevant to both the sensitive period question and the issue of oral versus written tasks. Johnson (1992) found that, in general, the youngest group of learners (age 3-7 years) outperformed the older groups of learners (ages 8-10, 11-15, 17-39) on the written task. However, there were no significant differences among the three older groups on this task. The author argues that this supports the notion of a decline in grammatical knowledge with older ages of learning even on written tasks.

An even more interesting result, however, involves the comparison of these results on the written task to those on the aural task by the same learners. Essentially, the written task was found to be much less discriminating than the aural task. Adult learners' (age 17-39) performance on the written task represented a 60% improvement over the aural task, and the 11-15 years group improved 30% over the aural task. The younger age groups (3-7 and 8-10 years) did not improve significantly on the written task. Also, as noted above, there was no difference between the 8-10 year old group and the 11-15 year old group on the written task. This is in direct contrast to the results found on the aural task.

Despite the fact that in the overall results the three older groups performed similarly, and that the two oldest groups improved substantially on the written task, Johnson does not view this as evidence that grammatical knowledge is any less affected by maturation than previously thought. Johnson argues that the test was quite easy and a more difficult test could result in a decline in performance on the written task. The author proposes two possible reasons for the differential results on the aural and written tasks. Either the aural processing constraints produced a lower level of performance than one should expect on the aural task, or the written task allowed learners to access sources of grammatical knowledge that are not available during normal speech and, thus, produced a higher level than one should expect. Johnson argues that both are possible, but suggests that the larger variance generally found in adult language learners' scores as opposed to younger language learners' scores reflects a normal distribution similar to more general cognitive learning. The nature of this difference, whether it is a result of maturity, formal instruction, or some combination of variables, is not known. Johnson (1992, p.247) concludes, however, that "adult learners' performance is more easily influenced by the performance characteristics of the tests used to measure competence than is the younger learners' performance".

Ultimate Attainment Studies in French Immersion

The term 'ultimate attainment' in this context is used to refer to students' performance at or after graduation from secondary school – the ultimate level in French immersion programs.

Morrison and Pawley (1986) tested students who had graduated from bilingual high school programs in the spring of 1984. Approximately one-half of these students had completed the EFI program and the other half, the LFI program. On two tests of receptive French proficiency taken at the University of Ottawa, no significant differences were found between the EFI and LFI groups. On a third test, an individual speaking test designed to measure fluency and communicative competence, the mean scores of the EFI group were significantly higher than those of the LFI students.

Genesee (1987) reported that in a study carried out in 1981 in which EFI and LFI students were followed for four years until the end of secondary school, EFI students did not consistently outperform LFI students in either listening comprehension, oral production, reading comprehension, dictation, or writing skills at the secondary level.

Wesche, Morrison, Pawley, and Ready (1986) administered a series of French proficiency tests to a group of EFI and LFI graduates of bilingual high school programs in the Ottawa area and from other parts of the country enrolled in first-year university programs. Significant differences were found with this first cohort studied in favour of the EFI students on the listening subtest and on all oral interaction tasks. There were no significant differences found between the two groups on the reading, vocabulary, or cloze tests. A follow-up of a considerably larger second cohort, however, showed no significant EFI/LFI differences on any measures, including an additional sentence repetition test. The researchers attribute the earlier findings to a "first cohort" effect (Wesche, 1993).

Concerning ultimate attainment in FI, the findings are not conclusive. Comparative studies involving EFI and LFI graduates have shown that students in both programs perform similarly on a large number of fluency tasks and more formal language tasks. In certain studies, however, (Morrison & Pawley, 1986; Wesche et al., 1986) an advantage was found for EFI students on more message-focused language tasks, as opposed to tasks which require a greater focus on and mastery of language form.

Summary

In summary, the short-term results in the areas of morphology and syntax that were found in the rate of acquisition studies, do not seem to persist in all studies of ultimate attainment. Two of the three studies cited above support this position (Patkowski, 1982; and Johnson and Newport, 1989), and suggest that age 15 may represent the upper limit of a sensitive period for native-like acquisition of morphology and syntax. The study by Coppieters (1987) suggests that adults learners of French as a second language are less proficient than native speakers but does not provide any comparisons with younger learners. The Johnson (1992) study suggests that the nature of the task may affect the results, and consequently, the conclusions about a sensitive period for morphology and syntax. Adult learners were clearly superior in their performance on the written task than on the oral task. Moreover, the 8-10 year old arrivals and the 11-15 year old arrivals performed similarly on the written task. This suggests that the sensitive period argument put forward by Long (1990), based on scores being inversely related to age of arrival, does not hold for the written task. Given the relatively few studies available and the inconclusive results, it would appear that an answer to the question of whether there is a sensitive period for morphology and syntax, and for other areas of SLA requires further investigation.

THE ROUTE OF ACQUISITION—INTERLANGUAGE, ORDER OF ACCURACY, AND DEVELOPMENTAL SEQUENCES

As discussed earlier, the search for evidence of a common route of SLA has generated considerable debate and study. There are three major concepts related to this topic which are discussed in this section: interlanguage, accuracy and order of acquisition, and developmental sequences. The concept of interlanguage involves a discussion of variability in the SLA process and provides important information for a discussion of the next two topics – order of accuracy and acquisition, and developmental sequences. Essentially, while a detailed acquisition order (e.g. specific morphemes being acquired in a rigid order) has been difficult to demonstrate, more general developmental sequences (broad stages) appear to be tenable.

Interlanguage

A fundamental concept related to the route of acquisition, and to sequence of development in SLA, is that of interlanguage (Selinker, 1972). Ellis (1986, p.47) remarks that the term interlanguage involves two concepts that are related but distinct: "First, interlanguage refers to the structured system which the learner constructs at any given stage in his development (i.e. an interlanguage). Second, the term refers to the series of interlocking systems which form ... the learner's 'built-in syllabus' (i.e. the interlanguage continuum)."

The basic tenets of early interlanguage theory were perhaps most clearly enunciated by Nemser (1971): (1) at any given time interlanguage is distinct from the L1 and L2; (2) interlanguage is an evolving series; and (3) two learners at approximately the same stage of proficiency will possess similar interlanguage systems. The L2 performance of learners at any given point was considered to be a reflection of their existing rule systems. According to proponents of these early versions of the interlanguage hypothesis, the process of SLA, the stages of development through which learners pass en route to mastery of L2 grammar, follows a predetermined order.

More recently, however, systematic variability has become more influential in discussions surrounding interlanguage. Ellis (1986) notes that, while learners' rules at a given stage in interlanguage development are internally consistent or systematic, the performance of those same time learners' may vary. This variation is seen to be of two types. First, an individual learner's performance may vary depending upon the specific situational and linguistic context. Second, learners within a given group may vary depending upon individual factors such as age, aptitude, intelligence, and cognitive style. In both cases, however, this variability is seen to be systematic and is distinguished from free variability which may reflect partially applied rules, performance errors (fatigue, stress, etc.), or other factors. It is with respect to systematic variability that one may identify a natural sequence of development. According to Ellis (1986, p.73) "SLA is characterized by a natural sequence of development (i.e. there are certain broad stages that learners pass through), but the order of development varies in details (i.e. some steps are left out, or specific morphological features are learned in a different order)". Indeed, the notion of developmental sequences and the more controversial issue of order of acquisition as they relate to interlanguage development have generated considerable research in the area of SLA.

Tarone (1983) proposed a continuum of interlanguage styles extending from the "vernacular" to the "careful" to explain the role of situational context on variability in language performance; the former being the most natural and the latter the most analytic. In between these two extremes are "attended speech data" and "various elicited tasks". Interlanguage style is seen as the result of the differing degrees of attention required of different performance tasks, but is nonetheless viewed as a facet of competence not merely performance.

Interlanguage theory has also had a major impact on our thinking about the nature of SLA, and viewing errors as evidence of the learner's active contribution to acquisition is a key principle (Ellis, 1986). Essentially, errors are perceived as evidence of the hypothesis testing process which, in turn, causes learners to revise their interlanguage system. Interlanguage theorists would claim that the learner is not so much committing an error as behaving grammatically in the sense that performance is based on systematic interlanguage rules (Jakobovits, 1970; Cook, 1969). In this respect, one cannot examine SLA with reference to the acquisition of forms only, but rather the relationship between form and function that exists at various stages of development. It is for these reasons that the terms error and learner language are used interchangeably. Lyster (1987) notes, for example, that a learner of French who regularly uses the verb construction *elle a entendé* in place of the correct form *elle a entendu* provides evidence of having simplified or over generalized the morphological rule of formation of the past participle. For this learner, the interlanguage rule which governs formation of the past tense is that past participles in French end with 'é'.

In the present study the process of SLA is examined with reference to the French verb system. Differences in oral and written performance among students in three French immersion programs and two grades are explored. In keeping with the arguments put forward regarding interlanguage, it is proposed that a second language learner's competence may be characterized as an internally consistent system – the different stages toward native-speaker competence may be described as if each possessed a grammatical system of its own, and that errors are evidence of a learner's ongoing acquisition process.

Order of Accuracy

Certain researchers have provided evidence in favour of the argument that the order of acquisition of an L2 follows a predetermined route. This inferred "order of acquisition" was usually based on an observed order of accuracy. Brown (1973), for example, with reference to L1 acquisition proposed that a criterion of 90% accurate use be used to indicate that an element had been acquired. However, whether the order of accuracy necessarily implies an order of acquisition is a highly questioned issue. One particular problem in determining an order of acquisition is that of 'backsliding'. Ellis (1986, p.293) notes that "L2 learners are likely to manifest correct target language forms on some occasions but deviant forms on other occasions. When this happens they are said to 'backslide'. Backsliding is seen to occur when learners are under pressure caused by having to express complex ideas or information, or by feeling overly anxious. Since test situations are often stressful for students, performance in such cases may be affected by the greater pressure that students feel, and backsliding may be an important factor in producing results that would not have occurred in more natural communication situations.

Dulay and Burt (1973,1974) claimed on the basis of two cross-sectional studies that the majority of errors produced by younger L2 learners was developmental (unaffected by the learners' first language – L1), and that, therefore, the order of acquisition of the grammatical morphemes in question was similar irrespective of the L1 of the learners. Bailey, Madden, and Krashen (1974) replicated Dulay and Burt's studies with older learners and found similar results. In a study of the relationship between learners who started to learn English in an instructional setting at younger and older ages, Fathman (1975) concluded that there were no differences in the order in which children learned to produce the different structures involved in a test of productive ability. Krashen, Jones, Zelinski, and Usprich (1978) examined order of accuracy under two different conditions – a spontaneous writing task with a set time limit and a careful writing task with an open time limit. It was found that these conditions did not affect the order of accuracy.

Larsen-Freeman (1976), however, found that the order of accuracy did vary according to the instrument used to elicit data. The order on oral tasks matched that of Dulay and Burt's studies, but tasks which required the subjects to focus specifically upon the form rather than the meaning of utterances produced a different order for older learners than for younger learners. Lightbown (1983) in a study of grade six Francophone students in Montréal learning English found that the accuracy order for certain English morphemes differed from that of other studies. The frequency of certain verb forms in student speech was interpreted as a reflection of the frequency of practise in the short term. In the long run, however, the frequency of such forms in the input (teachers' speech) and the context in which these occurred were felt to be more important factors in the occurrence of such forms. This seems to be supported by Hamayan and Tucker (1980) who found a moderate correlation between the frequency of correct forms in students' production and the frequency of these forms in the teacher's speech in a grade 6 EFl class.

To briefly summarize this issue, empirical evidence is inconclusive with respect to the effects of age and the nature of the task on the order of accuracy of specific morphemes in the L2. Certain researchers (Dulay & Burt, 1974; Bailey et al., 1974; Fathman, 1975) presented evidence that these factors are inconsequential, while others have found that there are differences in order of accuracy that occur as a function of the cognitive maturity of the learner or the degree of focus on language form required by the task (Larsen-Freeman, 1976; Lightbown, 1983; Hamayan & Tucker, 1980).

Developmental Sequences

As noted above, establishing an order of accuracy involves noting the occurrence of specific grammatical morphemes, and determining the accuracy with which these are used in required contexts. Determining more general developmental sequences, however, allows the researcher to make allowances for variations in specific morphological features, in favour of much broader stages of development. While order of accuracy studies tend to be cross-sectional, research on more general developmental sequences is usually longitudinal in design. Three longitudinal (case) studies involving classroom SLA are discussed in this section.

Schumann (1978) followed a Spanish adult learner of English as a second language (ESL) over a seven month period of instruction. Prior to instruction this learner only produced negative utterances of the type 'no + verb'. After instruction, elicited utterances showed a marked development (64% correct as opposed to 22% before), but spontaneous utterances showed no significant change. It appears that when the learner was focused on the form in test-like situations instruction had an effect on apparent development but in authentic communicative situations development remained unaffected.

Over a period of eight months, Felix (1981) studied 34 German pupils aged 10-11 studying first year English at a German high school. The classroom teacher employed a traditional audio-lingual teaching method. Felix examined negation, interrogation, sentence types, and pronouns and found that for each structure similar patterns were found between naturalistic and instructed SLA. Felix concluded that SLA in both settings involved the same processes. Even in very formal instruction where learners are forced to produce structures for which they are not ready, they choose randomly from these structures, and apply the same rules to them that characterize early naturalistic language acquisition.

Ellis (1984) studied three learners aged 10 to 13 years over a nine month period in an ESL language class which was primarily of the communicative type where there was a focus on meaning. Negatives, interrogatives, and verb phrase morphemes were examined, and all were taught formally during the nine month period. When the students' communicative speech in the classroom was analyzed it highly resembled the developmental patterns in naturalistic SLA. Ellis, like Felix, concluded that the same processes were involved in classroom and naturalistic SLA.

In the studies above, the developmental sequence for SLA is seen to be similar when the focus is on the message (in communicative classroom situations where speech resembles that of naturalistic settings). In Schumann's study, however, when the learner was provided with the possibility to focus consciously on the language form, a different developmental pattern tended to appear – namely more rapid evidence of accurate usage. This distinction between message-focused and form-focused tasks has also been discussed elsewhere in the L2 literature. Krashen (1982) argued that "monitoring" (consciously correcting language output) is limited by three main conditions – a language processing task requiring attention to language form, knowledge of the pertinent rule, and sufficient time to consult the explicit grammar. Hulstijn and Hulstijn (1984) found that while focus on language form generally required more time than focus on meaning, knowledge of the rule and a focus on form were more important variables. Finally, Bialystok (1981) argued that two of these conditions (focus on form and sufficient time) are met by grammar tests, while oral communication meets neither condition. This message-form dichotomy is directly related to the discussions of classroom methodology and the verb test instruments which follow.

CLASSROOM METHODOLOGY IN FRENCH IMMERSION

Developmental sequence in SLA, as well as the rate of SLA, may vary depending upon whether the learner is in a naturalistic or an instructional environment. As noted in the introduction, FI programs are of particular interest in this respect. While the FI classroom is clearly an instructional setting, the nature of the program results in a language learning situation that resembles naturalistic settings. Krashen (1984, p.61-62) wrote the following:

> Second-language acquisition theory provides a very clear explanation as to why immersion works. According to current theory, we acquire language in only one way: when we understand messages in that language, when we receive comprehensible input ... In all successful methods the focus is on the message and not the form, on what is being said rather than how it is said. Also, student speech is allowed to develop on its own – there is little emphasis on error correction and grammatical accuracy

In this short citation, Krashen refers to two poles of L2 instruction – purely analytic, form-focused teaching and totally experiential, message-focused teaching. Stern (1990) traces the analytic/experiential dichotomy back to the mid 1960s when several objections were made to the general use of analytic techniques in language teaching (Newmark and Reibel, 1968; Jakobovits, 1968). Harley (1993, pp.256,247) provides the following discussion of *experiential* and *analytic* orientations in language teaching:

> The term experiential is used to refer to message-oriented teaching focus that is mostly typically associated with immersion programs, where the main emphasis is on using the language naturally as a vehicle for subject-matter content. This experiential teaching strategy is distinguished from an analytic strategy involving deliberate, linguistically focused instruction. The analytic strategy includes teaching that targets specific features of the L2 code – such as aspects of pronunciation, syntactic structures, vocabulary, sociolinguistic functions, or features of connected discourse – as well as any focus on developing specific

> language skills; it can also include teaching that focuses on developing metacognitive strategies for SLA such as planning, monitoring, and self-evaluation.

Harley (1993) goes on to comment that experiential and analytic approaches to instruction should not be perceived to be mutually exclusive, but rather as complementary aspects of effective L2 teaching. Indeed, a discernible analytic focus has been observed in certain classrooms at the grade 6 and grade 8 levels in early, middle, and late French immersion programs (Dicks, 1992).

Using this analytic-experiential distinction, Allen, Cummins, Mougeon, and Swain (1983) developed a second language classroom observation instrument for focusing upon classroom instruction. Part A of this scheme, referred to as COLT (Communicative Orientation of Language Teaching), categorizes activities at the classroom level as either analytical or experiential in their orientation (see Allen, Fröhlich, & Spada, 1984). A crucial part of the present research involved an exploratory classroom observation study using a modified version of the COLT observation scheme (Dicks, 1992). This study provides a basis for the research questions and hypotheses which conclude this chapter and, consequently, is summarized below in some detail.

Categories for Observation

There were five major categories used in classroom observations based on the modified COLT scheme: Participant Organization, Content, Topic Control, Materials, and Discourse. Within each of these-categories, specific features were identified as being indicative of either an experiential or an analytic orientation to second language teaching. As noted above, experiential teaching is characterized by an absence of any explicit focus on language structure in favour of more message-oriented language use. Analytic teaching, conversely, stresses knowledge of basic sentence structure and vocabulary, and favours a more structured delivery of various language forms.

In Participant Organization group work involving student-student interaction was considered to be an experiential feature. The teacher interacting with the whole class or with individual students was deemed an analytic feature. Content which focused on language form was considered analytical, while message-oriented content reflected an experiential lesson. Topics controlled by the teacher were labeled analytic while student initiated and controlled topics were felt to be experiential features. Authentic materials – those intended for use by native speakers in natural settings – were considered to be experiential features. Pedagogic materials such as workbooks or reading passages containing selected linguistic structures were deemed to be analytic. The Discourse category involves two elements: exposure to minimal (sentence level or less) discourse or extended (beyond the sentence level) discourse; and a minimal range of reference (limited to the classroom setting) or an extended range of reference (issues beyond the classroom).

Classroom Observation Procedures

Two French language arts lessons were observed in 12 classrooms on two separate occasions approximately six weeks apart from mid-February to mid-April, 1990. In one classroom two observations were conducted on the same day and in another classroom only one observation was possible. The observation period varied from 45 to 90 minutes depending on the length of the lesson. While more observations would have been useful, the number had to be limited since the researcher was working alone and the process was extremely labour intensive. Notes were taken during each lesson using the major headings of the modified COLT scheme described above as a guide. Each lesson was tape-recorded and detailed descriptions of classroom activities were written immediately after each class observed on the basis of these notes and tape-recordings. Subsequently, the total number of predominantly analytic, predominantly experiential, and combined analytic-experiential characteristics were calculated as a proportion of the total number of features so as to produce a percentage for each type.

Synthesis of Results

The following is a synthesis of the findings resulting from observations in selected Grade 6 and 8 classrooms in EFI, MFI, and LFI. For a complete report including all descriptions of classroom lessons, see Dicks (1992). **Figure 2** presents the percentage of experiential, analytic, and combined experiential-analytic characteristics for each program at grade 6, grade 8, and overall.

Early French Immersion

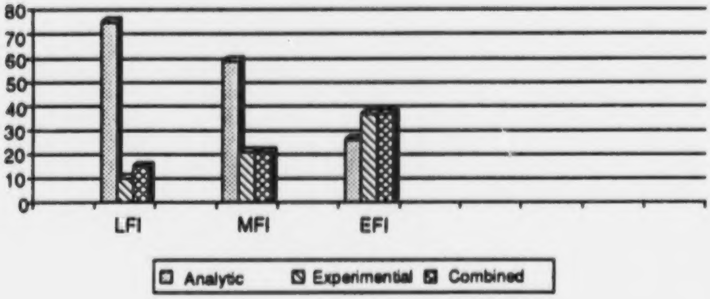
The Participant Organization pattern for these classes in the EFI program was whole class as opposed to group work, or combined whole class/group work interaction. The lesson Content tended to focus on language in meaningful context. The Topic was mainly controlled and selected by the students or a combination of students and the teacher. The source of Materials was predominantly non-pedagogic. Finally, Discourse was mainly of an extended nature.

The percentage of characteristics displayed in **Figure 2** indicates that these EFI classes are considerably less analytic in their focus (24%) than either the MFI (56%) or the LFI (70%) classes. The lower percentage of analytic features observed in EFI accompanied a higher percentage of experiential characteristics in those classes (47%) than in MFI (26%) or in LFI (10%). The percentage of combined features (29%) is also greater in EFI classes than in either the MFI or LFI classes which have about 20%.

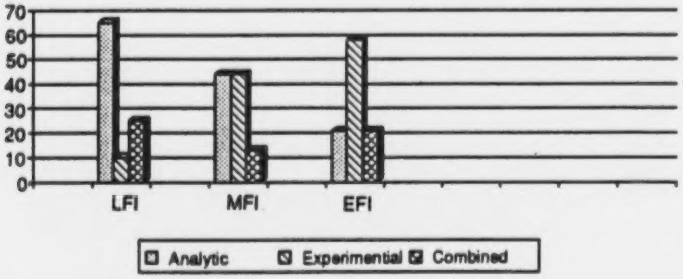
There is a considerable degree of variation from grade 6 to grade 8 with respect to the proportion of analytic and experiential features. At grade 6, EFI classes tend to display more analytic or combined analytic-experiential features, while at grade 8 there tends to be a much higher proportion of purely experiential features.

Figure 2
Type of Pedagogical Activity by Grade Level and Type of FI Program

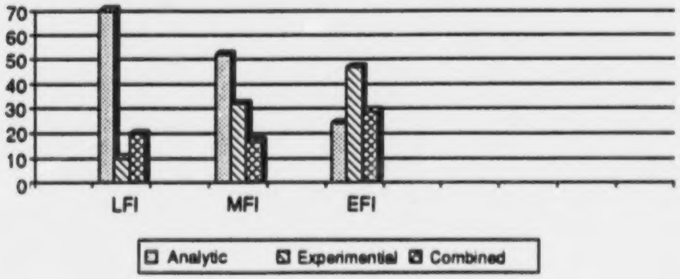
Pedagogical Characteristics — Grade 6



Pedagogical Characteristics — Grade 8



Pedagogical Characteristics — Total Program



Middle French Immersion

The Participant Organization pattern for the classes in the MFI program was whole class as opposed to group work, or combined whole class/group work interaction. There was a near even split in lesson Content with focus on both language in isolation and on meaning. The Topic was mainly controlled and selected by the teacher. The source of Materials was evenly divided with half being pedagogic and the others mainly non-pedagogic. Finally, Discourse was mainly of a moderate or extended nature. It is clear from the percentage of characteristics displayed in **Figure 2** that these MFI classes, while largely analytic in their focus (56%) were considerably less so than the LFI classes. The lower percentage of analytic features observed in MFI is balanced by a higher percentage of experiential features (26%) as opposed to 10% in LFI. The percentage of combined experiential-analytic features is similar in both LFI and MFI. There is a large degree of variation from grade 6 to grade 8 with respect to the proportion of analytic and experiential features. At grade 6, MFI classes tend to be more analytic while at grade 8 there is an even division of analytic and experiential features.

Late French Immersion

The Participant Organization pattern for these classes in the LFI program was whole class as opposed to group work. The lesson Content focused more on language in isolation or combined with meaning, than on meaning alone. The Topic was always controlled and selected by the teacher. Materials were predominantly pedagogic in source. Finally, Discourse was minimal or moderate.

From the percentage of characteristics displayed in **Figure 2**, it is apparent that the LFI classes are predominantly analytic in their focus — 70% of all features observed were categorized as analytic while only 10% of all features are designated to be experiential, and only 20% to contain elements of both. There is very little variation in this pattern from grade 6 to grade 8.

Discussion

Class Differences Across Programs

From the findings of this study, it is suggested that differences in the orientation of French language arts classes in the FI classes observed may be related to the program in which those classes are found. Classes observed in the LFI program tend to be more analytic; those in the EFI program, more experiential, and those in the MFI program, between the two.

These findings may be explained by the proficiency levels of the students as determined by their starting ages, and the amount of time students have spent in the various programs. In EFI students begin at a young age and classroom activities favour more experiential language skills in the earlier years. It would not be surprising that, in the later grades, teachers appear to take advantage of this fluency and engage in more "message-oriented" activities or language activities embedded in a meaningful context.

LFI students, on the other hand, only begin their intensive French second language program at Grade 6, and have not had five years of immersion to become fluent in the L2. They do, however, possess much more advanced first language literacy skills than students entering EFI in Kindergarten or Grade 1. They are also, according to Piaget (1966) beginning the period of "formal operations" which is characterized by the ability to engage in abstract reasoning and generalization. In the LFI classes observed, the teachers seem to recognize both the limitations and strengths of students entering this program, and opt to use a more analytic approach than is found in classes in the other programs.

Students in the MFI classes, who began intensive French at a point between EFI and LFI, appear to benefit from a combination of analytic and experiential approaches. Students at grade 6 and 8 in MFI have had intensive exposure to French for two to four years and should be more fluent in the L2 than their peers in LFI, but not as fluent as those in EFI. They, too, have developed literacy skills in their first language before beginning French, but not as completely as students in LFI. It would seem logical that teachers tend to utilize both these aspects to develop an orientation that is a hybrid of experiential and analytic approaches.

Grade Level Differences

With respect to the grade level analyses, a higher percentage of experiential features is displayed at grade 8 than at grade 6 in both EFI and MFI. This follows the anticipated pattern which suggests that as students become more proficient in the second language, more emphasis is placed on experiential activities. However, this pattern did not hold for the LFI program where no appreciable differences were noted between the two grades. It was expected that more experiential features would have been observed in Grade 8 LFI classes in this program as well. However, the fact that the LFI students only begin at grade 6 may result in limited experiential skills for students at grade 8 in this program.

Summary

A large number of comparative studies of EFI with MFI and LFI have demonstrated that students in all three programs perform similarly on a number of narrowly defined second language tasks, but an advantage has been found for EFI students on more experiential tasks, particularly those measuring oral fluency (Swain, 1981; Lapkin & Swain, 1984; Morrison & Pawley, 1986; Parkin, Bonyun, & Unitt, 1989; Wesche, Morrison, Pawley, & Ready, 1986; McVey, Bonyun, Dicks, & Dionne, 1990; Lapkin, Hart, & Swain, 1991). Wesche (1988, 1993), however, found no significant long-term differences between EFI and LFI graduates on both analytic and fluency measures.

The similarities between students in later and earlier starting programs may be explained, in part, by the results of this exploratory study. The greater percentage of analytic activities used in later-starting programs (MFI and particularly LFI) may provide for more rapid gains on form-focused language tasks, and permit these students to "catch up" rather quickly to their peers in EFI. However, in the case of oral fluency and other types of more experiential language use, this does not seem to be the case. An early start and extensive exposure to the second language appear to be critical factors which influence the approach to classroom teaching, and may ultimately determine the proficiency of students with respect to communicative language use. This is especially important when students' experience is limited to the second language classroom.

RESEARCH HYPOTHESES

Research regarding the effects of starting age on both the route and the rate of SLA is inconclusive. Certain researchers claim that intensive exposure to a L2 at an early age (e.g., EFI) is most beneficial, particularly regarding overall fluency and pronunciation. Other researchers maintain that students who have an intensive later start (e.g. LFI) can achieve very well in the area of more analytic language use but are disadvantaged regarding fluency and pronunciation. On the other hand, empirical evidence also is available which shows that there are no remaining significant differences between EFI and LFI students at the end of high school on any measures.

Students in both EFI and LFI programs, however, have been shown to have considerable difficulty with the French verb system and with verb tense use in particular. The roles of experiential and analytic language and the difficulties experienced with the French verb system are issues which require further investigation in EFI and LFI, and particularly in MFI where very little SLA research has been conducted. One especially problematic area involves the aspectual distinction between the *passé composé* and the *imparfait*. An analysis of students' use of the *passé composé* and *imparfait* tenses is expected to provide an understanding of the developing rule system that these learners possess, and evidence for a general developmental sequence for acquisition of these two verb forms.

In the following section, three hypotheses are presented followed by a discussion of the *passé composé/imparfait* interlanguage analysis. The relevant theoretical and empirical arguments are also discussed in each case.

Hypothesis 1A

From the literature relating proficiency to the amount of exposure to the L2, students in EFI should have an advantage over those in MFI, who should have an advantage over students in LFI, with respect to oral and written performance in French in the short term. This would be especially true for performance which is more message-focused and less planned from a linguistic point of view.

Theoretical justification

Carroll (1969) and Singleton (1989) argue that in formal instructional settings time is perceived to be the key variable in the acquisition of a second language. Younger learners are seen to have long term advantages due to the opportunities provided by early instruction, particularly opportunities to receive better input (Hatch, 1977) and to spontaneously use the second language (Genesee, 1978; Swain, 1981).

Empirical evidence

Certain researchers have shown that in high school EFI students are superior to those in LFI on less academic tests of listening comprehension (Swain,1981; Lapkin & Swain, 1985). Morrison and Pawley (1986) demonstrated that EFI students were superior to LFI students on an individual speaking test designed to measure fluency and communicative competence. Research on verb tense use has indicated that EFI students performed better than MFI students on spontaneous speaking and free writing tests of verb tense sequence (Parkin, Bonyun, & Unitt, 1989). Harley (1989) found that EFI students showed an overall advantage compared to LFI students with respect to oral performance. Wesche, Morrison, Pawley, and Ready (1986) found small differences in favour of EFI over LFI graduates on a listening subtest and all speaking tasks, but no differences on reading, vocabulary or cloze tests. However, a follow-up study of a second cohort (Wesche, 1993) showed no significant EFI/LFI differences on any measures. The researchers attribute the earlier findings to the atypical nature of the first cohort.

Summary

Given the importance of early intensive exposure to the L2, and the overall cumulative effect of time, it would seem that students in earlier starting programs should outperform those in later starting programs on both oral and written tasks.

Hypothesis 1A

It is hypothesized that the degree of mastery of the French verb system on the more message-focused oral task is greatest in EFI, followed by MFI, and least in LFI. This degree of mastery is greater in grade 8 than in grade 6 in each program.

Hypothesis 1B

Regarding more analytic, cognitively demanding L2 tasks, the literature indicates that older, more mature learners have an advantage over younger learners. While students in the present study were all presently at approximately the same age in either grade 6 or grade 8, their ages of initial *intensive* exposure to French in the three programs were quite different. Students entering LFI and MFI generally possess superior cognitive maturity and L1 literacy skills than students entering EFI. Consequently, these later starting students are not expected to be very far behind their peers in EFI on more analytic, cognitively demanding tasks.

Theoretical justification

It is argued that, compared to younger learners, older learners are more cognitively mature, can better deal with the abstract nature of language, possess larger vocabularies, are better able to make grammatical generalizations, and can transfer first language literacy skills to the second language (Ervin-Tripp, 1974; Taylor, 1974; Ausubel, 1964). Consequently, older learners are seen to be better able to deal with cognitively-demanding, context-reduced tasks associated with school settings (Cummins, 1983). An explanation proposed for older learners' ability to learn at a faster rate than younger learners is that, in addition to knowledge gained directly from the input, these learners are able to receive explicit knowledge from formal instruction, and practise this until it becomes automatic (Stevick 1980, Bialystok 1981, Sharwood-Smith 1981, McLaughlin, 1987, 1990).

Johnson (1992) also maintained that there are three features of oral tasks which are unlike those of written tasks: the time constraints inherent in processing oral information, the difficulty of phonetic decoding, and the speed of the oral text. Johnson also argued that written tasks may not allow one to access older learners' 'usable competence' since they can resort to their explicit knowledge of grammatical rules. Written tasks are also seen to possibly disadvantage more fluent learners who tend to use top-down strategies and may overlook critical linguistic information.

Empirical evidence

A number of researchers have found that older learners performed similarly to or superior to younger learners on tasks involving morphology and syntax (Fathman 1975, Ervin-Tripp 1974, Snow & Hoefnagel-Hölhle, 1978; Morris & Gerstman, 1986). Johnson (1992) also found that older learners showed twice as strong a relative performance as younger learners on a written grammatical task, as compared to an aural task. With respect to verb tense use, Lightbown (1983) showed that the initial frequency of certain verb forms in students' speech was a result the frequency of formal classroom practice. Harley (1986, 1989; 1992a, 1992c) found that while EFI students were generally superior, LFI students were advantaged with respect to certain areas of the French verb system. Classroom observations conducted in the FI classrooms involved in the present study (Dicks, 1992) suggest that there are methodological differences in the treatment that students in those classes receive. These differences in methodological orientation tend to reflect a more analytic environment in later starting programs and a more experiential environment in earlier starting programs. The results of these observations were based on a limited number of classroom visits, and should not be interpreted as necessarily representative of these or other classes in these programs. It is important to recognize, however, that learner variables such as varying degrees of cognitive maturity, L1 literacy, and L2 proficiency likely play an influential role in shaping these different classroom environments. Thus, it is hypothesized that the starting age of learners entering different programs, interacting with other learner variables, may result in differences in program treatment, which, in turn, may produce varying degrees of competence in French (or different types of competence).

Summary

Concerning the rate of acquisition of specific verb tenses, it is expected that such acquisition will be fastest from grade 6 to grade 8 in LFI, followed by MFI, and slowest in EFI on the more cognitively demanding written task. This is based, in part, upon the differences in the method of instruction that students receive in the three programs, and differences in the types of tasks involved. Although at the grade 6 level, students in EFI, MFI, and LFI are of approximately the same age, the approach taken to the teaching/learning of the L2 reflects the different points of entry to these three intensive exposure programs. In other words, the cognitive maturity, L1 literacy skills, and proficiency in the L2 of students entering LFI results in a methodological treatment for these students that differs from that of students entering MFI and EFI. While the treatment effect discussed here is seen as directly related to the point of entry, this may be seen to influence the linguistic development of these students, and subsequent approaches taken to the teaching and learning of French as a L2.

Hypothesis 1B:

It is hypothesized that the degree of mastery of the French verb system on the more form-focused written task is greatest in EFI, followed by MFI, and least in LFI. This degree of mastery is greater in grade 8 than in grade 6 in each program. However, less consistent performance in the three treatments is expected on the form-focused written task. The greatest difference between grade 6 and grade 8 means on this test should occur in LFI, followed by MFI, and the least in EFI.

Hypothesis 2

Theoretical justification.

As noted above, it has been argued that older learners can learn certain aspects of the second language more efficiently than younger learners (Taylor, 1974; Ausubel, 1964; Ervin-Tripp, 1974; Cummins, 1983). This has been seen as a reflection of older learners' ability to take advantage of knowledge received from formal instruction, and to make this knowledge automatic (Stevick, 1980; Bialystok, 1981; Sharwood-Smith, 1981). Essentially, students exposed to intensive French at grades 4 and 6 may capitalize upon earlier formal instruction to make more rapid progress on more form-focused written tasks such as a rational cloze test. In this respect, such learners may be perceived to be side-stepping their 'usable competence' (Johnson, 1992).

Empirical evidence

Snow and Hoëfnagel-Höhle (1978) in a study of child learners in a natural setting reported that the 12-15 year olds demonstrated the most rapid acquisition of skills. Lapkin and Swain (1985), in a comparison of grade 9 EFI and LFI students, demonstrated that on all grammatical measures of speaking and writing there were no significant differences between the two groups – i.e. LFI had caught up. Morrison and Pawley (1986) also found no differences between EFI and LFI graduates of bilingual high school on two tests of proficiency taken. Wesche, Morrison, Pawley, and Ready (1986) found small differences in favour of EFI over LFI graduates on a listening subtest and all speaking tasks, but no differences on reading, vocabulary, or cloze tests. A follow-up of a second cohort (Wesche, 1993) showed no significant EFI/LFI differences on any measures. The researchers attribute the earlier findings to the atypical nature of the first cohort. Johnson (1992) found that older starting L2 learners performed significantly better on a written language task where they could access formally acquired knowledge as opposed to an aural task which measured their 'usable competence'.

Summary

The oral and written tasks used in the present study may be seen to be closer to one end or the other of the analytic-experiential spectrum. For the oral task students listen to a series of lengthy sentences recorded on audio-tape. After hearing each sentence, students are asked to repeat it. Although this task involves elicited performance, it contains rather strict time constraints and requires students to focus upon the message. In that respect it is viewed as being closer to the spontaneous speech end of the spectrum. The written task involves elicited data that reflect more monitored performance. Students are given a passage from which a number of verbs have been deleted. The verbs are provided in the infinitive form, and students are required to produce the correct tense. If the more message-focused, oral task is a better predictor of group membership, this task should separate the three groups more effectively. It is expected to do this because of the nature of the task. It is a time-constrained task where students are focused on the meaning (not the form), and have to rely upon their more natural, spontaneous second language competence. The more form-focused, written task, however, is not expected to discriminate as well among the groups, since students' could use knowledge of grammatical rules, analytic reasoning, and formal instruction to 'outperform their competence' and achieve at a level closer to students who started FI much earlier.

Hypothesis 2:

It is hypothesized that the more message-focused oral task will be a better predictor of group membership than the more form-focused written task.

Hypothesis 3

Regarding the route of SLA, previous studies comparing younger and older learners suggest that one would not expect to find any differences in the sequence of development among EFI, MFI, and LFI students on message-focused tasks. On more cognitively demanding, form-focused tasks, however, the literature reveals mixed results suggesting that older learners are able to monitor or edit written performance by referring to known rules.

Theoretical justification

According to certain interlanguage theorists (e.g. Selinker, 1972), the stages of development through which learners pass on their way to mastery of the second language grammar follow a predetermined, natural order. Other scholars have argued that there is a cognitive "critical period" for language learning (Krashen, 1975; Rosansky, 1975; Felix, 1981) which corresponds to Piaget's period of formal operations at puberty (Inhelder & Piaget, 1964). The development of a conscious understanding of language, an awareness of differences, and problem solving structures all work against the learner's natural ability to acquire language.

Empirical evidence

Dulay and Burt (1973, 1974) claimed, on the basis of two empirical studies, that the order of accuracy of specific grammatical morphemes was similar irrespective of the learners' first language. Krashen, Jones, Zelinski, and Usprich (1978) found that two different conditions — a spontaneous writing task with a set time-limit and an open careful writing task – had no effect on order of accuracy. Larsen-Freeman (1976), however, did find that the order of accuracy varied according to the task. On oral tasks, including elicited imitation, the order matched that of Dulay and Burt, but tasks requiring a specific focus on language form rather than on meaning produced a different order for older learners than for younger learners. Lightbown (1983) found that the order of accuracy of English morphemes by grade 6 Francophone students reflected the frequency of formal practice of specific forms in the short term. Harley (1986) examined verb use in a comparison of EFI students and LFI students who had the same amount of exposure to French. She found a similar order of accuracy for both groups with respect to the French verb system.

Summary

The literature appears to be inconclusive concerning the effects of specific language tasks on order of accuracy. There is evidence to support the position that accuracy order is not affected by learner variables such as age, L1, type of task or type of program. There is also evidence which suggests that formal practice, and the use of oral or written tasks may have an effect on accuracy order. Given the distinct nature of the form-focused written and message-focused oral tasks used in the present study, and the preliminary evidence suggesting varying degrees of formal instruction in different program alternatives, it is hypothesized that differences in accuracy order will occur on the more formal, written task.

Hypothesis 3:

It is hypothesized that the degree of functional and formal accuracy with respect to the various verb tenses – the *présent, passé composé, imparfait, futur* – will result in a similar order of mastery in all three programs on the more message-focused oral test. A different and less consistent order is expected for the more form-focused written test.

Implicational Scaling and Interlanguage Analysis

While a specific order of acquisition is extremely difficult to demonstrate, interlanguage theory and the concept of systematic variability provide a solid theoretical basis for exploring broad stages of development. It has been shown above that the *passé composé* and the *imparfait* are two particularly problematic aspects of French immersion students' acquisition of the French verb system. Consequently, a detailed analysis of students' use of the *passé composé* and the *imparfait* is described in the second part of Chapter Four. This analysis involves two separate techniques; one for each of the tasks used in the study.

The first analysis uses an implicational scaling technique to examine the order of accuracy of students' responses on the oral, elicited imitation task. This technique, which involves displaying the frequency of correct, partially correct, and incorrect responses graphically, is described in detail in Chapter Four. The intent is to show how an overall pattern of accuracy for various verbs in the *passé composé* and the *imparfait* may also be discerned for specific groups (e.g., grade 6 EFI, grade 8 MFI). It is anticipated that the pattern of accuracy of use for these two tenses will not vary substantially from one group to another on this more message-focused, oral task.

The second analysis involves a detailed examination of students' responses for these same two tenses on the more form-focused, written task. This analysis includes studying students' correct, partially correct, and incorrect verb tense usage in order to determine the form-function relationships at various levels. Students who use initially use the *présent* to represent *imparfait* meaning, for example, and who then use the *passé composé* to represent the *imparfait* would provide evidence for a developing sequence. Detailed analysis of various form-function relationships, both correct and incorrect, is expected to lead to a general development sequence for acquisition of these two aspects of the French past tense. This is particularly important since there is currently no evidence to indicate where these forms belong in the larger context of L2 development in French. As noted by Lightbown (1990, p.88),

> Although some morphological features of German and English have been tentatively assigned places on a developmental continuum, there is no research regarding where the passé composé/imparfait contrast would be placed on a French developmental continuum.

The reason for the two distinct types of analysis described above relates to the nature of the tasks themselves. In the case of the oral task, it becomes quite difficult to analyze form-function differences in detail. The pronunciation of parlais (an imparfait form) and parlé (a passé composé form) are very similar in French and, indeed, often exactly the same depending upon the linguistic and situational context. The sort of analysis used on the written task would be much less revealing on the oral task. The oral task is also more message-oriented. Students were provided with the correct form orally and had to imitate that form. The written task, however, is quite form-focused insofar as students were provided with infinitive forms for the verbs and were required to produce the correct verb tense form. Thus, the form-function relationship is, inherently, a much more important aspect of the written test.

In the next chapter, Chapter Three, the measuring instruments (including their rationale and process of development), the research subjects, data collection procedures, and data analyses are described.

Chapter Three

Research Design

In this chapter the relevant information on the research subjects, the instruments used, data collection procedures, and data analyses are presented.

Research Subjects

Three fundamental characteristics of the FI programs of the OBE ensured that the students selected were particularly suited to this study. These three basic program characteristics are related to two crucial factors identified in Chapter Two: the age of entry to the program, and the amount and intensity of exposure to the L2. First, at each grade level studied, it is possible to compare three groups whose point of initial intensive exposure to French varied substantially; these groups had different levels of cognitive maturity and first language literacy when they began intensive French study. Second, by the end of grade 6 and grade 8 the total amount of exposure to French for later starting students (e.g., LFI students) is still less than that of learners starting at a younger age (e.g., EFI students). This eliminates the possibility that a greater total amount of exposure might account for any advantage for learners who received intensive exposure to French at a later age. For example, if students in grade 8 LFI perform better than students in grade 8 EFI, this cannot be attributed to more total exposure to French for the grade 8 LFI students. Third, students in all three programs have an identical amount of exposure to French from the end of grade 6 to the end of grade 8, allowing the rate of learning within each program to be compared over an equally intense two-year period.

A total of 335 students from the Ottawa Board of Education (OBE) were involved in this study during the 1989-90 and 1990-91 school years. These students were in 14 classes at grade 6 and grade 8 in the EFI, MFI, and LFI programs. A total of 13 schools were involved, seven at grade 6 and six at grade 8, representing different geographical areas of the city. Classes which were known to have a major disruption during the school year (e.g., a teacher on extended sick leave) were avoided.

Since it was possible to include the entire population of MFI (the least known program variant) in the study, students in the other groups (EFI and LFI) were selected to match those in MFI on the basis of comparable scores on the **Ottawa Board of Education Mathematics Test (OBEMT)** and **Gates-MacGinitie Reading Test (GMRT)**. Thus, two classes at each grade level in EFI and LFI were chosen to compare with the four grade 6 and two grade 8 MFI classes. (See **Table 2**.)

Table 2
Mean Scores on the GMRT and OBEMT, Age on Entry (AE) and Age at Time of Testing (ATT) by Grade Level and Program

Program	Grade	No. Schools	No. Classes	N	GMRT	OBEMT	AE	ATT
EFI	6	2	2	49	33.8	32.9	5.4	12.1
MFI	6	2	4	80	34.0	31.7	9.2	11.9
LFI	6	2	2	50	33.5	33.4	11.1	11.8
EFI	8	2	2	65	32.3	27.8	5.2	13.9
MFI	8	3	2	37	31.5	26.8	9.2	13.9
LFI	8	2	2	54	32.1	28.2	11.2	13.9
MFI-R	8	2	2	37	33.1	29.2	–	–

The 1989-90 MFI group at grade 8 is a lead cohort (the first group of students to enter the MFI program at the OBE). The majority of students in this first cohort had been in a regular English program at the primary level before entering MFI. Only four students had had prior experience in a FI program, and three students had entered the MFI program from outside the OBE. However, since this group was a lead cohort, it was decided that this study should be replicated with a second cohort of grade 8 MFI students. Lead cohorts sometimes possess characteristics which are somewhat atypical in comparison with the rest of the population (e.g. more intelligent, more highly motivated, higher level of socio-economic status). Consequently, the study was replicated with a second cohort of grade 8 MFI students consisting of two classes in the spring of 1991. The results for this second cohort of grade 8 MFI students are presented above and are denoted by the label 'MFI-R'. (See **Table 2.**)

Regarding **Table 2**, it is important to note that the numbers indicated refer to entire class populations for each grade level. When specific testing was conducted, these numbers varied as a result of illness, lack of parental permission to take part in the study, attrition, and other such factors.

The age of entry (AE) to EFI varied slightly from grade 6 to grade 8 with grade 6 students being slightly older on average upon entry to Kindergarten. The AE at grade 4 in MFI was identical for grade 6 and 8 students. In LFI, grade 8 students were slightly older on average upon entry to that program in grade 6. At grade 6, the LFI group, on average, is somewhat younger than the MFI group, and both these groups are younger than the EFI students. At grade 8, the mean age is identical for all three programs. (These data were not available for the second grade 8 MFI cohort.)

It may be seen that the scores from both standardized tests the **GMRT** and **OBEMT** are quite similar for students in all three programs at grade 6 and at grade 8. The lower mean scores for the grade 8 groups compared to the grade 6 students result from the fact that a different form of the test was used at that grade level. The second cohort of MFI students on the two standardized tests scored somewhat higher than those of the original MFI cohort.

Measuring Instruments

Regarding acquisition of the French verb system, two instruments were developed to examine students' use of French verb tenses: a more message-focused oral performance task – an **Elicited Imitation** test, and a more form-focused written task – a **Rational Cloze** test.

This study was conducted in the context of a general evaluation of its MFI program by the OBE. The evaluation conducted by the OBE involved the use of a thematic, integrated test package entitled *Bienvenue au camp de la gélinotte* (Lapkin, Argue, Lévy, Scane, & Swain, 1985). In order to maximize extra-linguistic context and to simulate natural communication situations, it was decided to develop two test instruments which would involve the same theme as that of the *Bienvenue* test – a French language summer camp. The purpose of these instruments was to examine students' use of French verb tenses on a message-focused oral performance task (the **Elicited Imitation** test) and a form-focused written task (the **Rational Cloze** test).

With respect to the actual selection of verbs and verb tenses, this researcher examined the written section of the *Bienvenue* test given during the previous year to Grade 6 EFI and MFI classes. Based upon 30 students' written production on this test a list of frequently used verbs and verb forms used was established. The verbs, both in terms of semantic content and tense, were selected to be suitable for students ranging in ability from grade 6 LFI to grade 8 EFI. Both these instruments as well as field-testing and scoring procedures are described below. (The **Elicited Imitation** and **Rational Cloze** tests as well as a listing of the verbs involved may be found in **Appendix A** and **Appendix B** respectively.)

In a reference to interlanguage in Chapter Two, it was noted that systematic variability in performance is related to situational and linguistic context (Ellis, 1986). This is directly linked to the notion that monitoring of performance (i.e., focusing upon language form, accessing and applying the appropriate rule) is seen to result in the production of correct target language forms with more consistency. Tarone (1983) views situational context as a continuum ranging from the vernacular to the careful style, reflecting differing degrees of attention in performance. Ellis (1986) argues that this has specific implications for research in SLA since the nature of the task can determine the kind of learner language one observes. If researchers are interested in careful style, they will need elicited data and, if interested in interlanguage as a variable system, will require a range of tasks. Similarly, data on different tasks requiring different degrees of attention must be kept separate if the systematicity of interlanguage is not to be disguised.

Consequently, as noted above, two related but different tasks were used in this study. The **Elicited Imitation** test is a more spontaneous, time-constrained oral test which requires students to repeat selected utterances while focusing on meaning. Menyuk (1969), for example, using imitation as a means of verifying data she had gathered from children's spontaneous first language productions, found that children could only imitate those structures they could produce spontaneously, or that were being produced by children slightly more advanced linguistically. The **Rational Cloze** test is a more analytical, written test which is focused specifically on verb tense use (language form), and which provides students with the time required to access grammatical rules and to apply these in specific linguistic contexts.

The purpose of these tests was to elicit students' oral and written productive performance of the *passé composé, imparfait, présent,* and *futur* tenses of French on tasks which reflect situations involving more spontaneous, message-oriented language use (**Elicited Imitation**) and more analytic, form-focused language use (**Rational Cloze**). Given the complexity of the written forms of the French verb system, it was expected that grammatical spelling would contribute to lower accuracy scores on the **Rational Cloze** test. Students' performance on each of these measures was examined with respect to acquisition of the specific aspects of the French verb system. The theoretical premises for each of these tests and the actual test development process are presented below.

Elicited Imitation Test

Rationale

The term "elicited imitation" refers to repetition that is produced by a subject when deliberately asked by an experimenter to imitate a selected utterance. It is based on the principle of "chunking" (Miller, 1957): the coding of several individual stimulus items into conceptual units such as letters into words. The short-term memory (STM) span is seen to be fairly constant across different conceptual units. The use of elicited imitation in tapping language competence dates back to Fraser, Bellugi, and Brown (1963) who used the task to show that young children were able to imitate structures which they were unable to produce spontaneously in their L1. This was interpreted as evidence that imitation was nothing more than a perceptual-motor skill and that the ability to imitate an utterance was independent of any grammatical knowledge of the structures involved. However, since this first experimentation with elicited imitation, there have been many conflicting opinions expressed regarding the conclusions.

As noted above, Menyuk (1969) used imitation as a means of verifying data she had gathered from children's spontaneous first language productions and found that children could only imitate those structures they could produce spontaneously, or that were being produced by children slightly more advanced linguistically. It was argued that the extra memory aid of the structures present in the model sentence provided the stimulus for children to produce structures that they were in the process of integrating into their production systems.

Slobin and Welsh (1971) noted that when a young female child's own utterance was offered as a model for imitation immediately after its production, it was more or less successfully repeated. However, ten minutes later, when the original contextual support was gone, the utterance had to be processed in linguistic terms alone and the child was unable to interpret it. In this way, elicited imitation may show a more limited competence than may actually be present in spontaneous speech. On the other hand, the same authors also note that this child can spontaneously utter sentences that she cannot imitate and can provide recoded imitations of sentences which exceed her productive capacities.

The same authors (Slobin & Welsh, 1971) refer to the important relationship between imitation and memory span. The same child referred to above perfectly imitated ungrammatical sentences if they were short enough for her to hold in short term memory (STM). The filtering of sentence recognition and imitation through the individual's productive linguistic system occurs only when length or complexity exceeds STM capacity. Naiman (1973) argued that the sentences presented for repetition in the Fraser et al. (1963) study were so short that correct imitation could be achieved by rote memorization with no need for comprehension or encoding of the structures involved. Later research has indicated that in order to successfully repeat a sentence which exceeds STM span, a child must be able to comprehend the grammatical structures which that sentence contains. Moreover, the child must then encode the utterance according to the child's own interim grammar or production system which may resemble that of the model sentence or deviate from it in varying degrees (Ervin-Tripp, 1970; Naiman, 1973). Naiman (1973) argues that if the sentences presented for repetition are of sufficient length, correct imitation cannot be achieved by rote memorization, but will require comprehension and encoding of the structures involved. McDade, Simpson, and Lamb (1982) also found in a study of L1 acquisition that elicited imitations produced after a short delay correlate most strongly with grammatical development as measured from spontaneous speech.

Hunt (1987) suggests that a psychological theory of comprehension explains how people cope with the real-time pressures inherent in comprehension. He argues that by combining the syntax of sentence structure with the semantics of words one can construct propositions from sentences. These are seen as two distinct abilities and Hunt proposes that STM or working memory is heavily involved in sentence analysis but only minimally involved in lexical access. Hunt claims that some information about a linguistic utterance has to be held in working memory while further information is being processed. The efficiency of the memory process is determined by the amount of attention required by the comprehension process, since this determines how much attention can be given to the memory process. This argument may be seen to be related to McLaughlin's (1990) notion of controlled and automatic processes discussed in Chapter Two.

Hunt notes that a test of STM or working memory involving isolated sentences will be an imperfect measure of the memory resources available during verbal comprehension. Studies of the role of working memory in the comprehension of isolated sentences probably underestimate its importance in normal discourse comprehension, since many of the propositions expressed in sentences in connected text can only be understood in reference to information in previous sentences. Indeed, if conclusions regarding discourse competence are to be drawn from elicited imitation tests, it would seem essential to build in as much contextual support as possible from both discourse and extra-linguistic sources.

Kintsch and VanDijk (1978) refer to discourse as a macroproposition that is gradually built up by identifying and piecing together micropropositions in individual sentences. The listener must keep in working memory those parts of the developing macroproposition that will be needed to put new micropropositions into their appropriate place as they are identified. These arguments, which are consistent with modern theories of communicative language ability based on pragmatics (e.g., Oller, 1972; Bachman, 1990), point toward the importance of having an integrated text as the basis for sentence repetition tasks. There are also implications here for the construction of cloze tests which are discussed in a later section.

Gregg (1986) notes that the span of STM is fairly constant across different materials whether digits, letters, or unrelated words. This is related to Miller's (1957) concept of "chunking" noted above. The invariance of the STM span (seven plus or minus two chunks) is evidence of the principle that the principal unit of STM is the chunk. Baddeley, Thomas, and Buchanan (1975) note that memory span for words is negatively related to the number of syllables in them – the longer the words the smaller the span. Naiman (1974) notes that in sentences of 15 syllables in length, the STM capacity of students was overloaded, and that students in order to recall the information had to hold chunks for processing. Those children who were quite competent in the second language were able to chunk all the information sufficiently – memory capacity was available for decoding, and for storing information about the exact form of the model sentences. Children who were less competent in the second language were unable to chunk and unable to fully process the lexical and syntactic information. The ability to do both these tasks is considered to be a necessary step for imitation. However, in order to imitate, the information must not only be successfully encoded, but also the structure involved must be present in the production grammar of the student (Ervin-Tripp, 1970; Naiman, 1973).

There are immediate implications here for the development of elicited imitation tests. First, with respect to the role of STM and the concept of chunking, it is important that the sentences presented for repetition be of sufficient length to avoid rote memorization. Second, if such sentences are to approximate naturalistic language use, it is essential that they form a contextual cohesive whole and not be simple isolated unrelated sentences. Third, a slight delay before repetition has been found to correlate more closely with spontaneous utterances. Last, it should be recognized that the ability of students to repeat such sentences will provide some indication of these students' spontaneous productive abilities. However, as noted above, clues in the sentences provided for repetition may result is some students repeating sentences which are not yet a fully integrated part of their natural language use. In other cases, sentences may not be successfully repeated yet such structures may be found spontaneously in the students' language.

Description

The **Elicited Imitation** passage was written by the researcher. The passage involves a story about two girlfriends – one francophone and one anglophone – who want to attend the same summer camp and compromise by choosing a bilingual camp. The text is one friend's account of how that decision came about and is presented in the form of a winning entry to a radio contest. In this way a certain amount of realism was given to the oral passage that students were required to listen to in the language laboratory. The constraints involved the number of syllables per sentence, a balance in the different types of verbs and verb tenses used, vocabulary and expressions that would be understood by students at the Grade 6 and Grade 8 level, and a theme which suited that of the larger testing package, *Bienvenue au camp de la gélinotte* (Lapkin et. al., 1985).

The passage was judged to be acceptable by three educated native speakers of French. It was read aloud for recording by a native francophone and recorded by a professional technician at the phonetics laboratory of the University of Ottawa. An auditory signal inserted after each sentence following a delay of two seconds indicated to students when to begin to repeat each sentence. The responses were scored as either correct (2 points), partially correct (1 point), or incorrect.

Based on the results of previous tests (Naiman, 1973; **The Sentence Repetition Test,** Modern Language Centre OISE, 1987), and the pilot testing done for this study, the model sentences used in the imitation test were between 12 and 15 syllables long. There were a total of 21 sentences which contained 30 different verb forms to be imitated: 11 *présent*, 10 *passé composé*, 5 *imparfait*, and 4 *futur*. All 21 sentences were part of an integrated passage which was read in its entirety at normal speed before each sentence was read individually for repetition. (A pause of ten seconds was left for students to repeat each sentence.) The following are four of the sentences used, each one containing an example of a different verb tense form to be imitated.

1) Present tense, First person plural, Irregular verb *faire*:
Lynn et moi, nous faisons beaucoup de choses ensemble.

2) *Passé composé*, Third person singular, Reflexive verb *s'amuser*, *être* auxiliary:
   On s'est pas amusé du tout l'été passé.

3) *Imparfait*, First person plural, Irregular verb être/ third person singular, Regular verb *sembler*:
   Nous étions désespérées. La vie nous semblait triste.

4) *Futur*, First person singular, Regular 'er' verb parler/third person singular, Regular 're' verb *apprendre*:
   Je parlerai anglais et Lynn apprendra le français.

Rational Cloze Test

Rationale

The term *cloze* was borrowed from the Gestalt psychological concept of *closure* which refers to the tendency of humans to fill in gaps in patterns. The first use of the word *cloze* is attributed to Taylor (1956) who used it to refer to a test whose original purpose was to measure readability. Words were deleted from an integrated text according to given criteria so as to create a contextually interrelated series of blanks (Taylor, 1953 cf. Oller & Conrad, 1971). The learner's task was to reconstruct the text by supplying the appropriate words. The average score for the group, then, was considered to be a measure of the level of difficulty of the passage in question. Modern cloze tests follow similar procedures but are not limited to measuring difficulty of texts. While there is considerable debate concerning what exactly the cloze test does measure, it is generally recognized as a valid predictor of general language ability and appears to be related to verbal intelligence.

Oller (1979) claims that if a test is to elicit a valid sample of language behaviour, two conditions referred to as pragmatic naturalness criteria must be present – the first involves the need to understand the meaning of the text in the sense of mapping it onto extralinguistic context; the second refers to time constraints that challenge STM. Oller argues that both fixed-ratio and rational cloze tests meet the pragmatic naturalness constraints referred to above.

The former, fixed-ratio cloze, is the procedure whereby every nth word is deleted and the number of correct responses is taken as an overall index of an examinee's ability to process the text. The second type, rational cloze, involves the deletion of words on a selective basis – for example, "words that are richly laden with meaning ... nouns, verbs, adjectives, adverbs, or some combination of them in the text in question" (Oller, 1979, p.346). In either fixed-ratio or rational cloze tests, the important role of extralinguistic meaning is a direct result of the coherent, integrated nature of the text. The time constraints are perhaps less obvious. In determining the correct response for a blank a reader has to process information that may have been read much earlier in the sentence and held in STM. Unless STM is able to depend upon an efficient grammatical system to process elements fairly quickly, leaving it to deal with new incoming information, errors will occur. These errors will be the result of a breakdown in the processing of long range temporal constraints.

Bachman (1985) also discusses the issue of fixed-ratio versus rational deletion procedures. It was found that deleting words from a passage on a fixed-ratio basis only resulted in a majority of "within clause" and "extra-textual" deletions. Bachman argues that in order to make a cloze test essentially a test of cohesion, one would wish to maximize deletions of the "across clause, within sentence" and "across sentences, within text" levels of context. When such deletions were made based on a rational deletion procedure, the reliability and concurrent validity of the test were not affected. Moreover, the test developer is better able to control the content validity of such tests by selecting the words to be deleted on a principled basis.

It may be seen from the discussions above that elicited imitation and both fixed-ratio and rational cloze tests reflect a similar underlying pragmatic theory of language competence. The modified cloze test used in this study which deletes specific verb forms and prompts the student with the infinitive form can be considered a rational cloze procedure. First, the verb tenses which have to be produced require the student to use both structural constraints within sentences and discourse level constraints within the entire passage. Second, the overall meaning of the text which requires mapping the story onto extralinguistic context is important in the understanding of the sequence of events and, by extension, the use of verb tense sequence.

However, a major point of distinction between the **Elicited Imitation** and **Rational Cloze** tests used in this study relates to the temporal constraints involved in each. While the **Rational Cloze** test contains the usual time restrictions of written language discussed above, these are much less constrained than those of speech. Consequently, the testee in the case of a rational cloze test is able to focus more directly on language form and structure in order to decipher meaning, whereas, in the case of speech, comprehension must be more immediate and more global. Moreover, the **Rational Cloze** test, because it is a test of written verb tense forms, involves the added element of grammatical spelling, which increases the difficulty of the task. This distinction is fundamental to the major question which is investigated in this study. Essentially, the nature of the task (i.e. the influence of varying linguistic and situational contexts) influences the degree of attention learners are able to dedicate to performance (Ellis, 1986; Tarone, 1983). In this study, because of the added complexity of the written verb task (the **Rational Cloze** test), students were allowed ample time to analyze the passage, to focus on the language form, to recall the appropriate grammatical rule from memory, and to apply that rule. The **Elicited Imitation** task, which did not possess the same exigencies regarding grammatical spelling, was highly time-constrained and message-focused.

Description

In setting out to develop a common **Rational Cloze** test for students at grades 6 and 8, the researcher spent considerable time reading magazines destined for adolescent francophones. Eventually, in one magazine a text was discovered which involved a topic related to the summer camp theme and which appeared to be suited to students at both grades 6 and 8. The passage, which was written with francophones in mind, was considerably too complex for use in immersion without modification. It was also much too long to be used in its original form as a **Rational Cloze** test. After many modifications, deletions, and revisions, a draft version of the **Rational Cloze** test evolved. It is the story of three boys who take a camping trip and have an interesting experience with a beaver. The final text, while inspired by the authentic magazine story, was substantially different.

This draft text was then verified by three educated native French speakers for naturalness and accuracy and was deemed to be appropriate. A rational cloze procedure was used to delete the verbs according to the criteria discussed above. In order to ensure that this test was one of verb tense sequence only, and not of lexical verb knowledge, the verb which had been deleted was given in the infinitive form beside each space. The draft passage was verified by a French Language Arts consultant of the OBE who was working with Grade 6 FI programs and had previously been involved with FI at Grades 7 and 8. She verified that the choice of verbs and verb tenses was appropriate for the grade levels involved, and that the reading level was also suited to the students' abilities. The consultant then compared the draft cloze passage with the *Tableau des connaissances en écriture* – a document which illustrates the verb types and tenses expected to be known by Grade 6 students. This supported the appropriacy of the verb selection. The consultant also noted that these same verbs and tenses would be the focus of oral language work in the classroom and would be suitable for the oral testing. The verb tenses chosen for the **Rational Cloze** (and the **Elicited Imitation**) were the *passé composé, imparfait, présent*, and *futur*, as all these would be familiar to most Grade 6 students and nearly mastered by Grade 8. The final version of the **Rational Cloze** test included 34 items (10 *présent*, 11 *passé composé*, 6 *imparfait*, 6 *futur*, and 1 *plus-que-parfait*). However, only 32 items were included in the final analysis (one of the *passé composé* items was ambiguous and the *plus-que-parfait* item was only correctly answered by one student). The following two sentences are examples of different tenses required of students. (See **Appendix B** for the complete test and verb listing).

1) *Présent*, First person plural, Regular '-ir' verb *choisir*:

   Chaque été, nous faisons du camping en forêt. Nous (choisir)____________ toujours le même endroit pour planter notre tente.

2) *Imparfait*, Third person singular, Regular '-re' verb *attendre*:

   Lorsque nous sortions de la tente chaque matin, il y avait toujours un castor qui nous (attendre) ____________ pour dire bonjour.

In the first example the expected response is *choisissons* and in the second example it is *attendait*. The possible scores are 0, 1, or 2. A score of 0 would indicate a totally incorrect response. A score of 1 would represent a partially correct response; that is, a case where it was clear from the student's response that he or she had identified the tense required but was unable to form it accurately. A score of 2 was awarded for a totally correct response.

Field Testing

Both the **Rational Cloze** and **Elicited Imitation** tests were field tested on two separate occasions. The first involved only three students from grade 6 LFI and three from grade 8 EFI. The second, however, involved a full class of grade 6 LFI students and a full class of grade 8 EFI students. Neither of these classes was included in the research. Prior to these two field trials, the **Rational Cloze** test was also administered to a class of second language testing students in a linguistics class at the University of Ottawa. This was a class made up of both anglophone and francophone students. Some of the anglophones had been in FI programs while others had followed core French programs. The main purpose for administering the test to this group was to obtain preliminary feedback regarding the level of difficulty and length of the test, and, more importantly, to identify any problems with ambiguity in the passage used or with instructions for completing the test.

Preliminary Test of Rational Cloze with University Students

This preliminary field test involved the **Rational Cloze** test only and was carried out on March 19, 1990. Before taking this preliminary version of the **Rational Cloze** test, these students were asked to provide a self-assessment of their French grammatical ability, to indicate if they were francophone or anglophone, and if they had graduated from either LFI or EFI programs. At this point the test, which contained 25 items, was scored dichotomously – either answers were exactly right or they were marked wrong.

Prior to taking the test, these students were asked to assess their own competence in French on a scale of 1 to 5 where 1 represented little or no competence in French and 5, excellent competence. The mean scores in relation to self-assessed competence were as follows: 1 – 28%, 2 – 52%, 3 – 72%, 4 – 80% and 5 – 88%. Based upon students self-assessment of ability the test appeared to be discriminating well.

The mean score for the whole class was 82%. The mean score for francophones was 96% and for anglophones was 68%. Students were also asked to indicate if they had graduated from LFI or EFI programs. Graduates from LFI had a mean score of 48% and those from EFI a mean score of 72%. Based on these results it was felt that the test was functioning as expected with the exception of the length. It was anticipated that the test would take 30 minutes to complete and even the lowest scoring students had finished in about 20 minutes. Consequently, the passage was slightly revised and the number of verb deletions was lengthened to 37 from 25. The increased number of items was expected to result in a test that would take approximately 30 minutes to complete and would provide a larger number of responses upon which to base conclusions about students' verb tense use. Students in this class reported no difficulties regarding ambiguity of the passage or with elements of French style or grammar.

First Field Test

The first field testing of both the **Rational Cloze** and the **Elicited Imitation** tests was carried out on March 27, 1990 with three students from grade 6 LFI and three students from grade 8 EFI at one of the schools not involved in the immersion evaluation study. It was felt that students from these two programs would be selected as they represent the extremes of the testing subjects – one year of French instruction versus eight years of instruction. Also, teachers were requested to choose a strong, a moderate, and a weak student with respect to grammatical ability for this field-test. The scoring for this session was based upon a combined score for exact and partially correct responses for both the **Rational Cloze** and the **Elicited Imitation** tests. Students were awarded one full point for an exact response and one-half point for a partially correct response; that is, if they clearly identified the required tense but were unable to produce it accurately. The results for the **Elicited Imitation** test indicated a mean score of 40% for the three LFI students and 80% for the EFI students. The **Rational Cloze** test results demonstrated a similar pattern with the LFI students having a mean of 35% and those in EFI with 86%. Based upon these results it was felt that the tests covered an appropriate difficulty range. The EFI students did well, as expected, but did experience some difficulty and the LFI students found the test hard, but were able to experience a degree of success. After an analysis of the **Rational Cloze** test items, however, it was decided to eliminate two deletions in order to provide more linguistic and contextual clues at two different points in the passage, thereby reducing the number of items from 37 to 35. Also, the **Elicited Imitation** test was reduced from 30 to 21 sentences since the time required appeared to be rather long both in terms of the students' attention spans and the time available for laboratory use.

Second Field Test

A second field testing session was carried out on April 5, 1990 with a grade 6 LFI and a grade 8 EFI class from a school not involved with the study. The revised **Elicited Imitation** test now included 21 sentences (30 verb tense items since there were some sentences which contained two verb tenses), and the revised **Rational Cloze** test included 35 items. The scoring procedure used here was similar to that in the second field-testing session in that both partially correct and exact scores were counted. However, instead of a half-point/full-point system, it was decided to award 1 point for a partially correct response and 2 points for an exact answer for both the **Elicited Imitation** and the **Rational Cloze** test. The following are some examples of how this scoring scheme was applied:

0- A score of 0 was awarded for each response which clearly indicates that the learner is unable to identify the verb tense required.

1- A score of 1 was awarded for each response which clearly demonstrates that the learner recognizes the verb tense required but is unable to produce the form accurately.

For example, for the future tense the learner may say or write *nous ira* instead of the exact response *nous irons*; *j'ai allé* instead of *je suis allé*; *ils veut* instead of *ils veulent*.

2- A score of 2 was awarded for each response which clearly demonstrates that the learner has produced the tense required using the accurate form. Spelling errors which are not directly related to conjugation will not be counted as errors.

For example, for the verb *gaspiller*, *nous gasspillons* would be accepted as an exact response although there is a spelling mistake, because this mistake does not directly relate to conjugation of the verb '*gaspiller*'. For the verb *s'appeler*, *Je m'appele*, however, would be considered a one-point error since the exactly correct form *je m'appelle* requires that the letter 'l' be doubled as part of the conjugation of that tense.

The maximum score for the 30 item **Elicited Imitation** test was 2x30 = 60, and for the 35 item **Rational Cloze** test was 2x35 = 70. Based on the mean scores and standard deviations for this field-test trial from these two 'extreme' groups, it appeared that both instruments were behaving as anticipated. (See **Table 4**). While both instruments presented a considerable challenge for grade 6 LFI students, this group was able to achieve a measure of success. The grade 6 LFI mean score for the **Elicited Imitation** test, 25.9, corresponds to 43%, and the mean score on the **Rational Cloze** test, 26.9, corresponds to 38%. As expected, in grade 8 EFI the mean scores were higher on both tests: 50.9 or 85% for the **Elicited Imitation** test and 35.3 or 50% for the **Rational Cloze** test.

It is important to recognize, however, that the **Rational Cloze** test was comparatively more difficult than the **Elicited Imitation** test at both grade levels. At grade 6 LFI, there was only a 5% discrepancy, but at grade 8 EFI the mean score for the **Elicited Imitation** test was 35% higher than for the **Rational Cloze** test. This difference in the degree of difficulty between the two instruments may account for some of the unexpected results which were found later. This issue, including factors which may have contributed to the **Rational Cloze** test difficulty, is discussed in Chapter Four.

Table 3

Mean Scores for the Second Field Test of the Elicited Imitation and Rational Cloze Tests at Grade 6 LFI and Grade 8 EFI

	Elicited Imitation (max=60)			**Rational Cloze** (max=70)		
Grade	mean	s.d.	N	mean	s.d.	N
6 LFI	25.9	–	18	26.9	–	18
8 EFI	50.9	–	22	35.3	–	22
Total	39.1	14.70	40	31.3	10.39	40

Analysis of the **Rational Cloze** test results indicated again that at one point in the passage there were too many deletions in too short a space resulting in a lack of linguistic context, and an overly difficult task:

> *Un jour Paul et Marc (partir) ________ chercher un endroit pour traverser le ruisseau à pied. Je les (attendre) ________ pendant deux heures. Finalement, Paul (rentrer) ________ sans avoir traversé ...*

Consequently, the correct verb tense (*sont partis*) was provided for first deletion for the final version of the **Rational Cloze**. This resulted in a final test which had a total of 34 possible items. As noted earlier, two of these 34 items were not included in the final analysis due to the ambiguity of the responses.

Reliability was calculated for both the **Elicited Imitation** and **Rational Cloze** tests using Cronbach's alpha and was found to be quite high at .94 for the former and .84 for the latter. The diversity of the sample (grade 6 LFI and grade 8 EFI classes) may have contributed to an inflated reliability estimate. However, the indices of reliability reported suggested that the instruments were reliable.

Development of Scoring Procedures

As noted earlier, the scoring criteria developed for both the **Elicited Imitation** and the **Rational Cloze** tests reflect both formally accurate and functionally appropriate responses. Rather than score each response as correct or incorrect, students were rewarded for responses which reflected the ability to recognize the tense required (functionally appropriate responses), and to produce these forms accurately (formally accurate responses). The functionally appropriate responses are labeled 'partially correct' and may be considered to be evidence of these students' developing grammar or interlanguage. Students are required, therefore, to recognize the appropriacy of a particular tense in a specific situation and to accurately produce that tense in terms of its grammatical form. Both recognition and accurate production reflect perfect mastery, recognition only reflects partial mastery, and neither one nor the other indicates lack of mastery. Apart from the allocation of scores, this type of categorization of responses can be extremely useful from a qualitative or diagnostic viewpoint.

For the **Elicited Imitation** test, each student's responses were recorded on cassette. A scoring sheet was devised which listed all the verb forms which occurred in the different sentences in the order in which they would be heard on the tape. A native-speaker of French was engaged to score these responses. In order to ensure that this scorer was correctly following the scoring scheme as intended, two training sessions were arranged to score the pilot tests that were done with a Grade 6 LFI and Grade 8 EFI class. In the first session both the experimenter and the scorer met to discuss the scoring scheme. Any ambiguities in the descriptions were discussed and clarified to the satisfaction of both the experimenter and the scorer. Then, five students' recordings were listened to and scored independently by the experimenter and the scorer. The scores attributed for each item were compared immediately after listening to each student's recording. Any discrepancies in scores or problems in interpreting the scoring criteria were discussed until they were resolved to the satisfaction of both the scorers. A sixth student recording was scored following the same process and there were no differences between the experimenter's and the scorer's ratings for this student. It was decided that the experimenter would score all the remaining student recordings, note any adjustments that may be necessary in the scoring scheme, and meet again with the scorer who would re-score some of these recordings to ensure accurate interpretation of the scoring criteria.

After these training sessions, 16 cassettes containing the responses of 16 different students were selected at random from the first two classes tested and were re-scored by the researcher to calculate inter-rater consistency. The purpose of this inter-rater reliability test was to ensure that the scorer understood the scoring scheme, was applying it as the researcher intended, and was doing so in a consistent manner. There were 30 items on this **Elicited Imitation** test, and the score awarded by the original scorer for each of these items was compared with the score given by the researcher. The proportion of inter-rater agreement was 469/480 which represented 98% agreement. It was clear from the extremely high percentage of inter-rater agreement that the scorer clearly understood the scoring scheme as it was intended to be used by the researcher. Since this scorer was responsible for rating all the **Elicited Imitation** tests, further tests of inter-rater agreement were not conducted.

In addition to this inter-rater agreement test, one-half of each class scored was selected at random by the researcher and returned to the scorer who was asked to rate these again in order to calculate intra-rater consistency. As in the case of the inter-rater agreement test, the scores awarded for each of the 30 items of the test were compared. Since 19 tests were selected, there was a total of 30x19 or 570 items which were re-scored. The scorer awarded an identical score for 511 or 90% of these items. The remaining 10% of the items were scored differently. While 90% agreement is an acceptable figure, the researcher and the scorer met to examine the items which had been scored differently the second time. These responses were listened to again on the cassette and a final score was determined by the researcher and the scorer. The discrepancies usually involved minor misinterpretations of the scoring criteria and the scorer felt that these difficulties would be minimized in future scoring.

Consequently, in order to monitor intra-rater consistency on an ongoing basis, a total of 15 students (approximately 10% of the total sample for the **Elicited Imitation** test was selected at random by the researcher and returned to the scorer at different intervals to be re-scored. The results of this reliability test are again reported in terms of percentage of agreement. There were a total of 15x30 or 450 items which were re-scored, and 442 of these items or 98% were awarded an identical score the second time. Of the 8 items or 2% which were scored differently, 6 differed by only 1 point and 2 items varied by the maximum of 2 points. This extremely high percentage of intra-rater agreement and the similar finding with respect to inter-rater agreement (both at 98%) indicate that the scorer had interpreted the criteria as the researcher intended and applied these criteria in a highly consistent fashion.

Data Collection

As noted above, this study of aspects of the French verb system was carried out in the context of a comparative study of EFI, MFI, and LFI students conducted by the OBE. The data collection for this study began in conjunction with the full scale testing program of the OBE in the spring of 1990. Both the **Rational Cloze** test and the **Elicited Imitation** instruments were scheduled to be administered to each class during a one hour group testing session at the language laboratory of the University of Ottawa. However, it was possible to test only two grade 6 classes (one EFI and one LFI class) on April 18, 1990 at the university before a labour dispute between teachers and the OBE caused cancellation of all research activities. When schools re-opened in early June it was impossible to arrange for any classes to be transported to the university for testing in the laboratory setting. Since time was limited, the researcher decided to administer the **Rational Cloze** tests to all grade 8 students in their classrooms from June 13 to June 21. It was particularly important to do this at grade 8 since these students would be moving to high schools in September and would no longer be together as a class unit. It was much more likely, on the other hand, that the class units of Grade 6 students would remain intact the following year in Grade 7.

Consequently, the remaining data (that is, both the **Rational Cloze** test and **Elicited Imitation** test for the remaining grade 6 classes and the **Elicited Imitation** test for the grade 8 classes) were collected during October and November of 1990. The original class units of Grade 6 students, now in Grade 7, were found to be mainly intact and were administered both the **Elicited Imitation** and **Rational Cloze** tests at the University of Ottawa in two separate laboratories. There were, however, a number of students who had transferred to different classes, different schools, or out of the school board resulting in smaller groups than originally were available. Two classes were accommodated at each session. The instructions and test format were identical for each class. The experimenter administered the tests to one group and a trained laboratory assistant who was familiar with the tests worked with the second group of students. The class teachers who were also present for the testing sessions acted as supervisors.

Before the **Elicited Imitation** test, the subjects were given a short period of initiation to the language laboratory. In order to minimize the negative affective factors associated with the new environment and the formal testing situation, students first listened to a popular French song recorded on the master cassette. Once they were more at ease in the laboratory setting and familiar with the equipment, they were asked to repeat four tongue-twisters as accurately as possible. This exercise closely simulated the test exercise in that the instructions, the response cue, and the pauses left for repetition were the same. Students were told that these were just for fun and would not count as part of the test score. The test itself was preceded by a practice sentence. The instructions for the imitation task included background information on the text in order to provide contextual support and make the task as realistic as possible. The directions which preceded the full passage were as follows:

> *Bientôt tu vas entendre une jeune fille qui raconte son histoire "Le camp idéal" à la radio franco-jeunesse. Cette histoire a gagné le premier prix d'un concours dont le but était de faire la publicité d'un nouveau camp d'été. Voici maintenant Sylvie Thérien qui présente son histoire à la radio. Ecoute bien. Après avoir entendu l'histoire, on va te demander de répéter quelques phrases.*

After the passage, the following instructions were given:

> *Avant de commencer, faisons un exemple. Répète la phrase suivante après le signal:* ***Je suis à l'Université d'Ottawa.***
> (Pause).
> *Très bien. Le test commence. Répète les phrases suivantes...*

All instructions were recorded so that in each case they would be identical for all students tested. This test lasted about 15 minutes with about 10 minutes for warm-up and examples, and 5 minutes for the actual sentence repetition task. After completing this task, students were given the **Rational Cloze** test.

The instructions for the **Rational Cloze** test were not recorded as this was entirely a written exercise. The two testers were provided, however, with clear type-written directions to be read to students prior to writing this test. These directions were as follows:

1) You are asked to write a number of verbs in the correct tense according to the action at different points in the story.
2) Read the full story first before writing any answers. Think about whether the tense at different points should be the past, present, or future. Also, look for specific clues to the correct tense – key words, verbs already given in a specific tense.
3) Start at the beginning and answer those you know first. Work on the others after.
4) Re-read the full story and check your answers – especially spelling, agreement (singular/plural), verb endings, etc.
5) Begin. Remember to read the story from beginning to end before trying to answer any items. This is very important.

Forty minutes were allotted for completion of this test. This was based upon pilot testing done at the laboratory with a Grade 6 LFI and a Grade 8 EFI that were not involved in the study. Even the slowest Grade 6 LFI students had finished in under thirty minutes and the Grade 8 students completed the test in considerably less time, the average being twenty minutes.

Grade 8 students, however, were in Grade 9 by this time, and had dispersed to a large number of high schools. These students had completed the **Rational Cloze** test in the spring of 1990, but had not had the **Elicited Imitation** test. Since it was logistically impossible to assemble large numbers of these students in the laboratory setting at one time, the researcher decided to go to the schools and administer the **Elicited Imitation** test on an individual basis with a stratified random sample of these students. As the Gates-MacGinitie Reading Test (GMRT) had been used as a control in selecting the classes for this study, students' scores on this test were converted to standard scores (z-scores). Then, twenty students from each of grade 8 EFI and LFI, and sixteen students from grade 8 MFI were selected for testing. Equal numbers of students were chosen from each classroom. The fewer number of students selected from grade 8 MFI reflects the smaller population of that program (thirty-seven students compared to sixty-five in EFI and fifty-four in LFI). Proportional samples were drawn from each standard score range to make up the required number of students. (See **Table 4**.). The numbers in parentheses indicate the actual number tested in those cases where a student did not show for the testing session.

It was felt that students would need the month of September to re-acquaint themselves with the French language after the summer break and the lengthy lay-off in the spring due to the labor dispute. Consequently, oral testing with individual students began on October 12. Due to the fact that each student had to be tested individually, the task was quite time consuming. It was also extremely difficult to work around schedules at the schools since the testing had to be done during French periods. As a result, the entire process was not completed until November 21, 1990.

Table 4
Numbers of Students Selected by Z-Score Range
for the Elicited Imitation Test at Grade 8 by Program

Z-score Range	**Number of Students by Program**		
	EFI	**MFI**	**LFI**
+2 — +1	4	2	3
+1 — 0	7	5	7
0 — -1	6	5(4)	7(6)
-1 — -2	3(2)	4(3)	3(2)
Total	**20(19)**	**16(14)**	**20(18)**

This testing with selected grade 8 students was done by using one portable cassette recorder with head-phones through which students listened to the pre-recorded passage and sentences for repetition – the same recording of the **Elicited Imitation** passage which was used in the laboratory setting. Students' responses were recorded using a second cassette recorder and external microphone. Each of the schools was able to provide a private room where the individual oral testing could take place.

While all schools were extremely cooperative in working around schedules and finding a suitable room for the testing to occur, there were some problems. Certain students forgot to come to the testing room at the appointed time which required the researcher to return to the school for a second session. In some cases students did not show up at all for the testing session. Due to attrition, 19 students were tested in EFI, 14 in MFI, and 18 in LFI on the **Elicited Imitation** test.

Data Analysis

In this section the hypotheses discussed in Chapter Two are presented and the types of analyses for testing the null hypotheses are described.

Hypothesis 1A:

It is hypothesized that the degree of mastery of the French verb system on the more message-focused oral task and on the more form-focused written task is greatest in EFI, followed by MFI, and will be least in LFI. This degree of mastery will be greater in grade 8 than in grade 6 in each program.

Hypothesis 1B:

It is hypothesized that, for the message-focused oral task, the difference in means from grade 6 to grade 8 is consistent across all three programs; i.e. reflecting steady progress in verb development in all three treatments. However, less consistent performance in the three treatments is expected on the form-focused written task. The greatest difference between grade 6 and grade 8 means on this test will occur in LFI, followed by MFI, and the least in EFI.

Analysis

A 2 X 3 analysis of variance was used for each of the two hypotheses representing students' performance on the **Elicited Imitation** and **Rational Cloze** tests for the three different programs at corresponding grade levels. This situation is illustrated with the diagram below:

	EFI	MFI	LFI
GRADE 6			
GRADE 8			

It was planned to follow-up these analyses of variance by univariate analyses of variance, Scheffé (p=.05) multiple comparison tests for program means, and independent t-tests (p=.01) for grade level means in the case of interaction.

Hypothesis 2

It is hypothesized that the more message-focused **Elicited Imitation** test will be a better predictor of group membership than the more form-focused **Rational Cloze** test.

Analysis

This hypothesis was tested using a discriminant analysis procedure. Discriminant analysis uses linear combinations of the independent (predictor) variables, the **Rational Cloze** and **Elicited**

Imitation test results, as the basis for classifying cases into one of six groups, grade 6 or grade 8 EFI, MFI, or LFI. The discriminant analysis procedure is reported using standardized correlation coefficients and classification tables of predicted group membership. In the case of the standardized correlation coefficients, both predictors (**Rational Cloze** and **Elicited Imitation**) were analyzed at the same time. The standardized coefficients provide the relative weights of each predictor. Each predictor (**Rational Cloze** and **Elicited Imitation**) was also analyzed individually in order to determine the specific degree of accuracy of group classification in each case.

Hypothesis 3

It is hypothesized that the degree of functional and formal accuracy with respect to the various verb tenses — the *présent, passé composé, imparfait, futur* — will result in a similar order of mastery in all three programs on the more spontaneous Elicited Imitation test. A different and less consistent order is expected for the more code-focused Rational Cloze test.

Analysis

The percentage of items correct for each verb tense on the two tests was compared for each grade in each program so as to determine the order of accuracy of the tenses.

Implicational Scaling and Interlanguage Analysis

In addition to the three hypotheses, an analysis of learner language (both errors and correct use) with respect to the passé composé and imparfait was carried out at grade 6 and 8 in each program. The purpose of this analysis was to better understand the developing rule system that learners possess and to gain insights into the sequence and process of second language development by learners in different programs at different grade levels.

Distinct types of analysis were used for students' responses on each test – an implicational scaling analysis for Elicited Imitation and an interlanguage analysis for Rational Cloze . Implicational scaling refers to a graphical representation of data that illustrates an order of accuracy that, in turn, may be interpreted to be indicative of a developmental sequence. It was anticipated that the implicational scaling analyses of the Elicited Imitation test, where students were focused on the message, would indicate a consistent pattern of verb development for the passé composé and imparfait for all groups involved. For the Rational Cloze test, a detailed interlanguage analysis of both correct, partially correct, and incorrect responses was carried out for selected students in each grade and program. Since the total number of students who wrote this test was quite large, a stratified random sample of 12 students from each grade in each program (n=72) was selected. It was anticipated that the interlanguage analysis of the Rational Cloze test, where students were provided with time to focus on the form and to access the appropriate rule, would indicate a less consistent pattern of verb development for the passé composé and imparfait for different groups, and an overall sequence that would vary from that demonstrated on the Elicited Imitation test.

A description of the research subjects, instruments, and data collection procedures and analyses have been presented in this chapter. In Chapter Four the results are presented and discussed.

Chapter Four

Research Findings

In this chapter the specific statistical analyses which were undertaken to test each of the hypotheses described above, as wells as the results of the implicational scaling and interlanguage analyses are described.

RESULTS FOR HYPOTHESES 1, 2, AND 3

Descriptive Data

Reliability

Reliability estimates for both the **Elicited Imitation** and **Rational Cloze** tests were calculated using Cronbach's alpha. As was the case in the field test trials, these indices were found to be satisfactory, .84 for the **Elicited Imitation** test and .86 for the **Rational Cloze** test.

Means and Standard Deviations

Table 5 provides a summary of the means and standard deviations for both the **Elicited Imitation** and **Rational Cloze** tests at grade 6 and grade 8 for EFI, MFI, and LFI. In addition, the mean scores for the grade 8 MFI group used in the replication study (MFI-R) are also reported separately. Before turning to the results of the statistical analyses for each hypothesis, there are several important points concerning the test results that are immediately obvious from **Table 5** and which should be discussed.

Table 5

Mean Scores and Standard Deviations by Grade Level and Program on the Elicited Imitation and Rational Cloze Tests

Elicited Imitation (max = 60)

	EFI			**MFI**			**LFI**		
	M	**S.D.**	**N**	**M**	**S.D.**	**N**	**M**	**S.D.**	**N**
Gr.6/7	45.9	5.94	36	40.9	8.08	50	36.1	9.00	45
Gr.8/9	53.0	4.80	19	49.8	4.59	14	43.4	4.51	18
Gr.8-R				44.3	9.60	39			

Rational Cloze (max = 64)

	EFI			**MFI**			**LFI**		
	M	**S.D.**	**N**	**M**	**S.D.**	**N**	**M**	**S.D.**	**N**
Gr.6/7	22.6	8.00	39	17.4	4.71	50	18.5	5.79	45
Gr.8/9	32.7	10.58	57	31.5	9.48	34	24.0	8.62	47
Gr.8-R				27.3		34			

As the results of the field test reported in Chapter Three suggested, the **Rational Cloze** test appears to be considerably more difficult than the **Elicited Imitation** test, nearly twice as hard in fact. This is true for all the FI groups involved. The highest mean score obtained on this test was 32.7 in Grade 8 EFI which corresponds to 51%. The lowest mean score was 17.4 in Grade 6 MFI which corresponds to 27%. The **Elicited Imitation** test, in comparison, is easier. The highest mean score was again found in grade 8 EFI (53.0 or 88%), and the lowest mean score was reported for grade 6 LFI (36.1 or 60%). The mean item difficulty for the **Elicited Imitation** test is .75 compared to .38 for the **Rational Cloze**.

This difficulty may be partially explained by the complexity of the written form of verb tenses in French. For the *passé composé*, for example, the written forms *allé* and *aller* constitute two distinct responses, whereas, when spoken, these sound identical and cannot be discriminated. Thus, the degree of accuracy required on the written **Rational Cloze** test was greater than on the oral **Elicited Imitation** test. Also, on the written **Rational Cloze** test, students were given the infinitive form of each verb and were required to both identify and correctly form the expected tense. This differs from the **Elicited Imitation** test where students heard the verb conjugated in the appropriate tense and had to imitate the sentence using that same tense. The former is a more complex and difficult task.

Due to the discrepancy in difficulty between the **Elicited Imitation** and **Rational Cloze** tests, meaningful comparisons should involve each group's relative performance on each test, and not their mean scores on one test compared to the other. In other words, whether EFI students outperform MFI students on the **Elicited Imitation** test and whether or not a similar pattern is found on the **Rational Cloze** test is a more meaningful type of comparison than one which compares EFI students' mean scores on one test with that same group's mean score on the other test.

The high level of difficulty found for the **Rational Cloze** test, in particular, may also be a major reason for a number of unexpected or unclear results. While it was hypothesized that students in later starting programs would make fairly rapid progress on the more form-focused test, it was not anticipated that their performance would equal that of any of their peers in earlier starting programs. However, on the **Rational Cloze** the grade 6 LFI group (18.5) performed as well as the grade 6 MFI group (17.8). Due to this comparatively high score for the grade 6 LFI group, the difference between grade 6 and grade 8 is considerably smaller than anticipated. It was expected that one would find the largest discrepancy between grade 6 and grade 8 within this LFI program. It appears that in LFI, students did indeed make rapid gains on the more form-focused task, but during grade 6 and not from grade 6 to grade 8 as expected. Related to this, is the unusually high score for the grade 8 MFI group (31.5) on the **Rational Cloze**. As a result, the discrepancy between grade 6 and grade 8 in MFI is larger than anticipated. The high level of difficulty of the **Rational Cloze** may have resulted in less consistent results.

Another factor which appears to have contributed to unexpected results in the unusually high performance of the original grade 8 MFI group. As noted above, this group performed nearly as well as the grade 8 EFI group on the **Rational Cloze** test. This was also true for the **Elicited Imitation** test. This group seems to be exceptional and may be influenced by particular group factors such as motivation or teacher effect. In contrast, the grade 8 MFI group used in the replication study do not appear to be as strong a group as the original cohort. The replication study group's mean scores of 44.3 on the **Elicited Imitation** and 27.3 on the **Rational Cloze** are considerably lower than those of the original group (49.8 and 31.6). When this replication group's scores were used, the results for Hypothesis 1A and 1B were somewhat different from those of the original group with MFI performing more like LFI than EFI on both tests.

Statistical Analyses and Results

Hypothesis 1A

> It is hypothesized that the degree of mastery of the French verb system on the more spontaneous, oral **Elicited Imitation** test will be greatest in EFI, followed by MFI, and will be least in LFI. This degree of mastery will be greater in grade 8 than in grade 6 in each program. Consistent performance is anticipated from grade 6 to grade 8 across all three programs, reflecting steady progress in verb development in all three treatments.

Hypothesis 1B:

> It is hypothesized that the degree of mastery of the French verb system on the more form-focused, written **Rational**

Cloze test will be greatest in EFI, followed by MFI, and will be least in LFI. This degree of mastery will be greater in grade 8 than in grade 6 in each program. However, less consistent performance in the three treatments is expected on the **Rational Cloze** test. The greatest difference between grade 6 and grade 8 means on this test will occur in LFI, followed by MFI, and the least in EFI.

Analyses

Hypotheses 1A and 1B were each analyzed by way of a 2x3 analysis of variance (ANOVA). Main effects for both grade (6 and 8) and program (EFI, MFI, LFI) were predicted for both hypotheses (both tests), but an ordinal statistical interaction was predicted between grade and program for Hypothesis 1B (the **Rational Cloze** test). The original MFI group was used in a first analysis, and the second cohort (MFI-R) was substituted in a second analysis. The results for the original group are presented first, and the results of the replication with the second cohort are presented separately

Results for Hypothesis 1A

Table 6 below provides a summary of the results of the analysis of variance procedure conducted for both the **Elicited Imitation** and **Rational Cloze** tests. As anticipated, analysis of variance for the **Elicited Imitation** demonstrated significant main effects for both grade and program; ($\alpha = .001$). The interaction, however, was not significant for the **Elicited Imitation** test ($\alpha = .05$), indicating that grade 8 and grade 6 differed significantly. Multiple comparison Scheffé tests were carried out to determine which of the three pairs of FI program means differed significantly at each grade level. At grade 6 it was found that all three program means differed significantly at the .05 level. At grade 8, EFI and MFI differed significantly from LFI, but EFI and MFI were not significantly different.

Table 6

Analysis of Variance for Elicited Imitation and Rational Cloze Tests by Grade Level and Type of Program

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig. of F
Elicited Imitation					
GRADE	2172.415	1	2172.415	43.458	.001
PROGRAM	2763.902	2	1381.951	27.645	.001
INTERACTION	22.967	2	11.484	.230	.795
Rational Cloze					
GRADE	4348.153	1	4348.153	85.349	.001
PROGRAM	830.469	2	415.235	8.151	.001
INTERACTION	716.850	2	358.425	7.035	.001

Consequently, for *Hypothesis 1A*, the expected order for grade (8>6) was supported, and the expected order for program (EFI>MFI>LFI) was supported for grade 6, and partially supported for grade 8.

Results for Hypothesis 1B

Analysis of variance for the **Rational Cloze** test demonstrated significant main effects for both grade and program; (p = .001), and, as predicted, there was a significant interaction (p < .05). As noted above, this interaction is evident in **Table 4** where the later starting grade 6 LFI group outperformed the earlier starting grade 6 MFI group. However, to determine more precisely the nature of the interaction simple effects testing was conducted. Two one way analyses of variance were carried out across programs at each grade level. These were followed up with Scheffé multiple comparison test (p < .05), and independent t tests (p < .01).

The multiple comparison Scheffé tests indicated that at Grade 6,.EFI was greater than and significantly different from MFI and LFI, while MFI and LFI were not significantly different. At Grade 8, the results indicated that EFI and MFI were greater than and significantly different from LFI, and that EFI and MFI were not significantly different from each other. Independent t tests showed grade 8 to differ significantly from grade 6 in all three programs ($p < .001$).

Thus, while the results for the **Rational Cloze** test indicate a significant interaction for grade and program, this interaction was caused by differences in program means at each grade level (EFI and MFI differed significantly at grade 6 but not at grade 8 while MFI and LFI differed significantly at grade 8 but not at grade 6). The fact that students in two later starting programs performed similarly to peers in earlier starting programs on this test was not totally unexpected. Indeed, the nature of this task favours students' abilities to use more academically based grammatical knowledge, and 'outperform' what they could normally achieve in more naturalistic language use. However, these results should be interpreted with caution. Despite the relatively large number of subjects involved, these comparisons were made on the basis of groups which were comprised of two classes in all cases except grade 6 MFI where four classes were involved. Consequently, factors which are particular to a given group may have influenced these results. These include such variables as teacher effect, degree of motivation, and class dynamics. The results of testing which was conducted in October in grade 7 did not show any advantage for those students over those tested in April of grade 6, however. In fact, the mean score for students tested in grade 7 was slightly lower than that of students tested in grade 6.

That later starting groups performed similarly to earlier starting groups in some cases is more closely related to *Hypothesis 2*, however, and will be discussed in that section. Of particular interest here is the fact that the anticipated ordinal interaction regarding grade 6 and grade 8 scores did not occur. It was expected that, due to the form-focused nature of the written **Rational Cloze** test, one would see larger grade 6 – grade 8 differences in students' performance in LFI than in MFI, and in MFI than in EFI. It was expected that LFI students beginning at grade 6 (the students with the least exposure to French) would exploit their grammatical knowledge and by grade 8 would "catch-up" to students in EFI. Because they were expected to be furthest behind, they would be able to make the most gains in this respect. This anticipated result did not occur, however. In examining the grade 6 and grade 8 mean scores within each program, there appear to be two major results which contributed to this unexpected result.

First, it is noted that the LFI group at grade 6 (18.5) scored only 5.5 points below grade 8 LFI (24.0), and were not significantly different from the grade 6 MFI group (17.8). Second, the difference between grade 6 and 8 MFI students' performance (13.7) is much greater than anticipated. This difference surpasses that separating grade 6 and grade 8 LFI (5.5) by a large margin. The principle reasons for this much greater discrepancy in MFI appear to be the rather low mean scores at grade 6 (17.4) and the rather high mean score at grade 8 (31.5). The grade 8 MFI mean score is quite close to the grade 8 EFI mean of 32.7, and, indeed, does not differ from it significantly.

Discussion

As noted above, the **Rational Cloze** was a very difficult test for all groups. This high degree of difficulty may have limited the range of what more able students in earlier starting programs were able to show. This may be one reason for the lack of significant difference between LFI and MFI at grade 6 on the **Rational Cloze** test. This difficulty may have also produced unexpected group mean scores such as at grade 8 EFI where students' performance was equaled by the grade 8 MFI group. While it was expected that students in later-starting programs might perform relatively better on this test than on the **Elicited Imitation** test, it was not anticipated that their performance would equal that of peers in earlier starting programs. If this test had been of optimal difficulty, the difference between the performances of students in earlier starting and later starting programs may have been closer to what was expected.

A second factor which may have contributed to unexpected results is the number of classes sampled. There were only two classes per group in all cases except grade 6 MFI. The unexpected results at grade 6 LFI and MFI and grade 8 MFI and EFI may relate to the performance of specific classes within each group. While these groups were selected on the basis of similar abilities on two standardized tests (the Gates-MacGinitie Reading Test (GMRT) and the Ottawa Board of Education Math Test (OBEMT), there could appear to be other factors contributing to differences in class outcomes. These factors could include a teacher effect or other variables such as attitude, motivation, aptitude, or class grouping. Indeed, analyses of the two grade 8 MFI class means (34.8 and 27.2) show that one grade 8 MFI class significantly outperformed the other on this test ($p<.05$). If one were to assume that the higher score is atypical and use only the mean score of the lower class (27.2), the grade 8 MFI group would still not be significantly different from EFI ($p > .05$), and while slightly better than the grade 8 LFI group, would not be significantly different from it ($p>.05$). Thus, while there does appear to be a classroom effect at grade 8 MFI, even the lower-performing MFI class still appears to be quite strong and performs similarly to the grade 8 EFI group.

Students in the later starting MFI program do appear to make fairly rapid gains on the **Rational Cloze** test whether one interprets the results of both classes or simply the lower scoring class. Similarly, by the end of the year, students in grade 6 LFI make what appears to be rather substantial progress, and surpass grade 6 MFI students. One assumes that such performance was not a result of core French instruction alone where both cumulative hours and intensity of exposure to the second language are extremely restricted. Rather, it may be attributed to the approximately 800 hours of intensive (100 per cent) exposure to French that this group received during their initial year of French immersion in grade 6.

These findings suggest that the grade 6 LFI performance may be a key factor in the smaller difference between grade 6 and grade 8 mean scores in this program. In effect, it may be argued that grade 6 LFI students make quite rapid progress – by the end of grade 6 in effect. One factor which may explain this, in conjunction with such variables as relative starting ages, cognitive maturity, L1 literacy, and L2 fluency, is the different treatment students receive in the different programs. LFI students, being at the stage which Piaget (Inhelder and Piaget, 1957) characterizes as formal operations upon entering the program, may benefit in the short term from a large degree of initial focus on language form. It would appear that this is the case, as the mean scores for grade 6 LFI on the very difficult, more analytical **Rational Cloze** test represent a considerable amount of verb knowledge. This comparatively high achievement, which is assumed to be a result of formal rule learning during the intensive first year of exposure at grade 6, is less obvious at the grade 8 level. Grade 6 LFI students may indeed be using formal rules and shortcuts to outperform their "true competence" at an early stage, while later, at grade 8, students in the other programs demonstrate a relatively greater mastery of the verb system on the more form-focused, written **Rational Cloze** test. However, because of the limited number of classes involved, these results may also reflect a 'teacher effect' or some other chance effect related to specific group characteristics that could not be controlled.

Replication Findings

As noted at the beginning of this chapter, in order to rule out the possibility that a 'lead-cohort' effect may be contributing to the grade 8 MFI students' performance, a subsequent grade 8 MFI cohort was tested using the same instruments. The Grade 8 MFI second cohort students have achieved at a higher level than Grade 6 MFI students on both tests. Some differences were found, however, in across-program comparisons.

For the **Elicited Imitation** test, the second cohort of grade 8 MFI students used in the replication study had a mean score of 44.3 and a standard deviation of 9.60 This score was found to be significantly lower (p<.05) than that of the original MFI cohort in the main study (49.8). Using this second cohort's mean score in the analysis of program differences for the **Elicited Imitation** test, one finds that while

EFI and MFI are now significantly different (p<.05) the significant difference between MFI and LFI has disappeared (p>.05). As in the main study, the grade/program interaction was not significant (p>.05). Thus, this second cohort of grade 8 MFI students appears to be more like LFI than EFI students regarding oral verb tense usage.

For the **Rational Cloze** test, the mean score for the second cohort was 27.3, as compared to 31.6 for the original cohort. This difference was not significant, however, at the .05 level. It is interesting to note that the score for the second grade 8 MFI cohort is nearly identical to that of the lower grade 8 MFI class in the original cohort (27.2). Both classes in the second grade 8 MFI cohort used in the replication study had similar mean scores on the **Rational Cloze** test (26.7 and 27.9). Analysis of variance indicated that there was once again no significant difference between EFI and MFI, and the significant difference between MFI and LFI has disappeared. While there was a significant interaction found in the main study, the interaction is not significant when the second grade 8 MFI cohort is used.

These findings seem to provide further evidence that the score for the MFI first cohort is being somewhat inflated by one atypically strong class for both oral and written verb tense use. Either a teacher effect or specific characteristics of one class of the lead MFI cohort (e.g., attitude, motivation, cognitive ability, class grouping) may account for the relatively high scores the original group obtained. Consequently, in further interpretations of the results for grade 8 MFI, it will be important to keep in mind that this group appears to be benefiting from one particularly strong class.

Hypothesis 2

It is hypothesized that the more message-focused **Elicited Imitation** test will be a better predictor of group membership than the more form-focused **Rational Cloze** test.

Analysis

Hypothesis 2 was tested using a discriminant analysis procedure for the **Rational Cloze** and **Elicited Imitation** tests. This analysis provided standardized correlation coefficients which indicate the relative weight of both predictors (**Rational Cloze** and **Elicited Imitation**), in correctly assigning students to their original groups. In addition classification tables indicated the percentage of students who, based on their scores on each of the **Rational Cloze** and **Elicited Imitation** tests separately, were correctly predicted to belong to their original groups. In the case of the standardized correlation coefficients, both predictors (**Rational Cloze** and **Elicited Imitation**) are analyzed at the same time.

Results for Hypothesis 2

It was suspected that, based on the mean scores in MFI, that these classes may have been contributing largely to incorrect classifications. The grade 6 MFI classes, for example, scored lower than the grade 6 LFI classes on the **Rational Cloze** test, and the grade 8 MFI classes were not significantly different from grade 8 EFI classes on this same test. Consequently, grade 6 MFI and grade 8 MFI were removed separately, and then removed concurrently to determine if this had an impact on the classification results. From **Table 7** below it is clear that grade 6 MFI is the group which created the greatest problem for correct classification.

When this group was removed from the discriminant analysis, the percentage of correct classification increases from 42% to 53%. The prior probability of correct classification varies depending upon the number of groups included in the analysis (1/6 or 17% when all six groups are included and 1/4 or 25% when grades 6 and 8 MFI are excluded). Consequently, the percentage of correct classification above chance in also reported in **Table 8**. The highest percentage of correct classification above chance occurs when grade 6 MFI is excluded from the analysis — approximately 33%.

Table 7
Percentage of Students Correctly Classified, Correctly Classified Above Chance, and Standardized Correlation Coefficients on both the Elicited Imitation (EI) and Rational Cloze (RC) tests by Grade Level and Type of FI Program

	Classification		Standardized Coefficients			
			Function 1		Function 2	
Group	**% Correct**	**% Above Chance**	**EI**	**RC**	**EI**	**RC**
All groups	42.46	26.21	-.642	.844	.775	.548
Gr.6 MFI Dropped	52.67	32.67	-.656	.831	.763	.563
Gr.8 MFI Dropped	43.64	18.64	-.668	.803	.749	.603
Gr.6 & Gr.8 MFI Dropped	56.41	31.41	-.689	.780	.729	.631

Table 8
Predicted Group Membership for the Elicited Imitation and Rational Cloze Tests Analyzed Separately by Grade Level and Type of FI Program

Group	**Correctly Classified**		**% Above Chance**	
	EI	**RC**	**EI**	**RC**
Gr.6 EFI	31%	8%	11%	-12%
Gr.6 LFI	67%	69%	47%	49%
Gr.8 EFI	74%	49%	54%	29%
Gr.8 MFI	14%	15%	-6%	-5%
Gr.8 LFI	39%	15%	19%	-5%
Total	**42%**	**31%**	**22%**	**11%**

For each of the four grouping situations, the first function accounts for 86-91% of the variance, and the second function from 9-14%. While each function does not contribute largely to the classification, each does make a significant contribution. In examining the standardized coefficients for the two predictors, it may be seen that both tests contribute to correct classification to a similar extent, but **Rational Cloze** has a slightly larger impact.

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The somewhat higher level of prediction found for the **Rational Cloze** test when it and the **Elicited Imitation** test were entered together was not anticipated. However, when entered separately, the **Elicited Imitation** test is a slightly better predictor than the **Rational Cloze** test. (See **Table 8** below.)

Each predictor, **Rational Cloze** and **Elicited Imitation**, was analyzed individually in order to determine the percentage of correct group classification for each. A high percentage of correct classification would indicate that, based on results on that predictor, students were effectively assigned students to their original groups.

Discussion

As noted above, there appear to be particular characteristics of this sample which may be contributing to these unexpected results. On the **Rational Cloze** test the extremely low classifications for grade 6 EFI and grade 8 LFI may reflect the fact that the mean scores for both groups are quite similar (22.6 and 24.0 respectively), and both groups have similarly high standard deviations (8.0 and 8.6 respectively). A similar situation occurs on the **Elicited Imitation** test. The grade 6 EFI and grade 8 LFI mean scores of 45.9 and 43.4 are quite close, and their standard deviations are similar (5.9 and 4.5).

Clearly, one would have liked a higher percentage of correct classification for both tests, and these apparently contradictory results may be caused by small sample size (only two classes per grade) which may have produced a less than representative group. An alternative explanation might be that there was a ceiling effect for EFI students. Thus, while there is some evidence that the **Elicited Imitation** might be a better predictor, this was not consistently demonstrated in the results of the discriminant analysis.

Hypothesis 3

It is hypothesized that the degree of accuracy with respect to the various verb tenses – the *présent, passé composé,* *imparfait, futur* – will result in a similar order of mastery in all three programs on the more message focused **Elicited Imitation** test. A different and less consistent order is expected for the more code-focused **Rational Cloze** test.

Analysis

Percentages for the verb subtests – *présent, passé composé, imparfait, futur* were calculated based on correct and partially correct responses. An order of accuracy was established for each grade and program combination for both the **Rational Cloze** and **Elicited Imitation** tests, based on the percentage correct obtained for each subtest (See **Table 9**).

Results for Hypothesis 3

It may be seen that the *présent* is the most accurately produced tense on the **Elicited Imitation** and **Rational Cloze** tests in all programs at both grade levels. (See **Table 9**.) The *passé composé* is ranked second on the more message-focused oral **Elicited Imitation** test at both grades 6 and 8, and in several cases is very close to the *présent*. This is not the case, however, for the **Rational Cloze** test where the *passé composé* is the most difficult tense for students in two programs at grade 6 – EFI and MFI; and in one program at grade 8 – EFI. In the remaining programs the scores for the *passé composé* are quite low. The higher degree of degree of difficulty for the *passé composé* may be related to difference between the oral and written tasks. Grammatical spelling related to the complexity of auxiliary verbs and past participle forms required for the written forms of the *passé composé* may have caused students more problems on the **Rational Cloze** test. (This is dealt with is detail in the interlanguage analysis section which follows.) However, another possible explanation for the difference in difficulty lies is that the two tests did not require students to produce the same verbs in the same tense.

Table 9

Percentage of Correct and Partially Correct Verb Tense Responses on the Elicited Imitation and Rational Cloze Tests by Grade and Program.

Elicited Imitation Test

	EFI 6	**MFI 6**	**LFI 6**
Présent	88%	79%	79%
Passé Composé	79%	74%	68%
Imparfait	68%	48%	29%
Futur	50%	48%	29%

	EFI 8	**MFI 8**	**LFI 8**
Présent	98%	90%	87%
Passé Composé	91%	90%	81%
Imparfait	77%	64%	42%
Futur	71%	71%	49%

Rational Cloze Test

	EFI 6	**MFI 6**	**LFI 6**
Présent	60%	50%	55%
Passé Composé	15%	10%	18%
Imparfait	35%	25%	13%
Futur	33%	23%	15%

	EFI 8	**MFI 8**	**LFI 8**
Présent	62%	61%	46%
Passé Composé	38%	55%	33%
Imparfait	64%	41%	47%
Futur	51%	49%	25%

The *imparfait* and the *futur* appear to be equally difficult for **Elicited Imitation** test. At grade 6, students in two programs, MFI and LFI, find both these tenses to be equally difficult. Students in the other program at grade 6, EFI, do considerably better on the *imparfait* than the *futur*. At grade 8, students in two programs, MFI and LFI, do somewhat better on the *futur*, and EFI students perform better on the *imparfait*.

On the **Rational Cloze** test, the situation with respect to the *imparfait*, and *futur* is less straightforward. At grade 6 EFI and MFI the *imparfait* and the *futur* appear to be the less difficult than the *passé composé*. In LFI scores for the *passé composé*, *futur* and *imparfait* were similar. In all cases these percentages were quite low. At grade 8, the *imparfait* is the easiest tense in EFI and LFI, and the most difficult in MFI. EFI and MFI students at grade 8 were twice as likely as LFI students to provide correct or partially correct responses for the *futur*.

A clear pattern for the **Elicited Imitation** test emerges at both grade levels. With minor exceptions, the pattern indicates a progression from to LFI to MFI to EFI with respect to accuracy on all four tenses. A clear distinction with respect to accuracy also emerges with the *présent* being the most accurate tense, followed by the *passé composé*, *imparfait* and *futur*. The pattern of verb tense accuracy is on the **Rational Cloze** test is different from that of the **Elicited Imitation** and somewhat less consistent: While the *présent* is also the easiest tense, the *passé composé* is the most difficult, and the *imparfait* and *futur* are ranked either second or third.

Discussion

In general, the *présent* tends to be produced with a high degree of accuracy on the **Elicited Imitation** at all grades and programs. The *présent* is the most accurately produced form at all grades and programs on the **Rational Cloze** test as well, but the degree of accuracy is considerably lower than found on the **Elicited Imitation** test. The accuracy percentages indicate that the **Rational Cloze** is indeed a harder test. As noted earlier, this is not surprising given the complexity of the written form of verb tenses in French. Harley, Cummins, Swain and Allen (1990), for example, found that grade 6 francophone students made a large number of homophonous verb errors. In this regard, the **Rational Cloze** results should be interpreted with caution, particularly for grade 6 where the percentages are quite low and where there is likely a large degree of guessing involved in students' responses.

With respect to the *passé composé* and *imparfait* the following patterns are noted. On the message-focused **Elicited Imitation** test students in all three programs at both grade levels demonstrate a high degree of mastery of the *passé composé* tenses. At both grade 6 and grade 8 the *imparfait* is third in order of accuracy but this accuracy increases from LFI to MFI to EFI. On the form-focused **Rational Cloze** test the *passé composé* is quite close to the *présent* with respect to the degree of mastery at grade 8 in MFI, but ranks quite low in other grades and programs. At grade 6, there is a clear progression in accuracy with respect to the *imparfait* from LFI to MFI to EFI. At grade 8, the *imparfait* is mastered to a similar degree as the *présent* in EFI and LFI, but considerably lower in MFI.

As for the *futur* on the **Elicited Imitation** test, at grade 6, there is a clear progression in accuracy with respect to the *futur* from LFI to MFI to EFI, and no difference between the *futur* and *imparfait* in MFI and LFI. At grade 8 the EFI and MFI students are similar and much better than students in LFI on the *futur* and *imparfait*. On the **Rational Cloze** test the *futur* ranks third in order of difficulty at all levels except grade 8 LFI where it is fourth. There is a noticeable increase however in the degree of accuracy to EFI from MFI and LFI at both grade 6 and grade 8.

These findings are similar to those reported by Harley (1986). As noted in Chapter One, Harley found that students performance in oral interviews at both EFI at grade 1 and LFI at grade 10 indicated a clear pattern of declining accuracy from the Copula > Present stem of verbs other than *être* > *Passé Composé* > Periphrastic future. In the present study, students in EFI, MFI, and LFI demonstrate a somewhat similar order of accuracy on the oral, message-focused **Elicited Imitation** test: Present stem of verbs other than *être* > *Passé Composé* > *Imparfait* > *Futur*. Harley also reported that a third element — third person plural distinction — was more accurately used than the periphrastic future by LFI students. Harley suggests that this may be due to the fact that LFI students have more form-focused input, use written materials more, and have a greater degree of maturity. The more natural input of grade 1 EFI classrooms is seen to be less advantageous for accurate number distinctions than for the basic distinctions of time.

These results may be seen to support Harley's findings regarding the accuracy order of the *présent, passé composé,* and *futur*. The finding that the *passé composé* preceded the *imparfait* is consistent with the findings of other studies of these two aspects both in L1 (Grégoire, 1947; Sabeau-Jouannet, 1977) and in L2 in a natural setting (Bautier-Castaing, 1977). Students in all three programs in the present study display a similar order of accuracy on the more message-focused oral **Elicited Imitation** test. On the **Rational Cloze** test, however, where students have the time to focus on language form and call upon the appropriate rule, the order is different.

As noted above, this may be explained by differences in oral and written tasks involved. Johnson (1992) argued that there were specific characteristics of oral and written tests that one should consider in interpreting results. First, it would appear from these results that the formal, more analytic training received by students in later starting programs allows these students to access their "didactically acquired knowledge" (Johnson 1992, p.220). Consequently, it is more difficult to assess what Johnson (1992, p.220) refers to as their "usable competence".

A second issue related to written tasks concerns more fluent L2 learners tendency to use more top-down processing strategies (Johnson, 1992). This may have had an effect on students' performance in the present study. The **Rational Cloze** test required students to examine the text carefully to determine the appropriate response. Some of the more fluent L2 learners may have read with more focus on meaning than on form, and, thus, may have overlooked important linguistic clues. Conversely, less fluent, more analytic learners may have been more focused on the text and the specific clues marking time such as other verbs in the *passé composé* or *imparfait*, adverbial phrases like *l'été dernier*, and indicators of repeated action like *souvent* and *toujours*.

While Johnson (1992) argues that written tasks advantage older learners, especially those who have had formal L2 instruction, the issue is somewhat more complex in the present study. The written passage used in the **Rational Cloze** test was an integrated text. In order for students to perform well, they would have had not only to focus upon the linguistic clues provided, but also, to read the passage for meaning. In essence, success on this task required both top-down processing and bottom-up processing skills. One might argue that the later starting learners who may have received more formal instruction were advantaged in certain respects, but fluency and the ability to use the contextual and situational clues in the passage were also involved. More fluent learners benefiting from experiential language learning situations may have been advantaged in this way. The most successful student would have been the one who used both top-down and bottom-up processing strategies whenever needed to arrive at the correct response. Having said this, it is nonetheless true that later starting students may have been able to access more formally acquired knowledge on the written test than on the oral **Elicited Imitation** test.

In Johnson's (1992) study the written task was considerably less discriminating than the aural task. Subjects who had begun intensive exposure to the L2 after the age of eleven improved significantly on the written task. While Johnson found significant differences between groups who had been exposed to the L2 at younger and older ages on the aural task, no difference was found among older learners (8 years and above) on the written task. The results of the present study partially support Johnson's findings. With the exception of EFI and MFI students at grade 8, earlier starting groups outperform later starting groups on the oral **Elicited Imitation** test. On the written **Rational Cloze** test, two later starting groups, one at each grade level, performed similarly to earlier starting groups: MFI and LFI at grade 6, and EFI and MFI at grade 8.

IMPLICATIONAL SCALING AND INTERLANGUAGE ANALYSES

The *passé composé* and *imparfait*, two aspects of the French past tense, are examined in this section. Specifically, the findings from two distinct types of analysis are reported – an implicational scaling analysis for the **Elicited Imitation** test and an interlanguage analysis for the **Rational Cloze** test. Implicational scaling refers to a graphical representation that illustrates an order of accuracy from which one may be able to infer a developmental sequence. It is anticipated that an implicational scaling analysis of the **Elicited Imitation** test, where students were focused on the message, will indicate a consistent pattern of verb development for the *passé composé* and *imparfait* for all groups involved. The interlanguage analysis, which involves a detailed study of form-function relationships for students' responses, is expected to reveal a less consistent pattern from one group to another. It is anticipated, however, that a general developmental sequence for use of the *passé composé* and *imparfait* will be able to be discerned from this interlanguage analysis of students' written responses.

As noted in Chapter Two, the discrimination between use of the *passé composé* and the *imparfait* has been shown to be particularly difficult for students in French immersion programs (Harley, 1984, 1986, 1992; Swain, 1985). Thus, before examining the results of the implicational scaling and interlanguage analyses, some time will be spent discussing the specific nature of the *passé composé/imparfait* aspectual distinction, as well as the more general distinction between tense and aspect.

Grevisse (1988) indicates a general principle and specific instances for use of the *passé composé* and the *imparfait*. For the *passé composé*, Grevisse (1988, p.1295) states that

> *Dans la langue écrite, où il existe en même temps que le passé simple, le passé composé exprime un fait passé, achevé au moment où l'on parle, et que l'on considère comme en contact avec le présent ... Le passé composé peut avoir aussi la valeur qu'a le passé simple dans la langue écrite.*

Essentially, then, in written language the *passé composé* is used in cases where there may be direct or indirect contact with the present, as well as in situations where such contact does not exist, and may be used as an alternative to the *passé simple*. Regarding the *imparfait*, Grevisse states in general terms that "*L'imparfait montre un fait en train de se dérouler dans une portion du passé, mais sans faire voir le début ni la fin du fait ...*" (p.1290). This explanation of the *imparfait* as referring to an action taking place at some time in the past without any indication of the beginning or the end points is felt by Grevisse to be all encompassing. The specific uses of the *passé composé* and the *imparfait* which Grevisse describes are exceptional and are not related to the uses required of students in the present study (e.g., the *passé composé* indicating a future event, the historical *imparfait*).

A more complete discussion of how aspect functions in language is provided by Comrie (1976). Regarding the distinction between tense and aspect, Comrie (1976, p.2) notes that tense "locates the time of a situation relative to the situation of the utterance". The commonest tenses found in languages, according to Comrie, are present, past, and future. These tenses situate events in relation to the moment of speaking. The past tense situates an event as having occurred prior to the moment of speaking; the present tense as occurring simultaneously with the moment of speaking; and the future tense as subsequent to the moment of speaking. Aspect, on the other hand, does not consider the relationship between the time of location of the event and the moment of speaking. Rather, "aspects are different ways of viewing the internal temporal consistency of a situation" (Comrie, 1976, p.3). Comrie (1976, p.3) explains the distinction between tense and aspect in the following way.

> The difference in French between *il lisait* and *il lut*, or in English between *he was reading* and *he read*, is not one of tense, since in both cases we have absolute past tense. It is in this sense that we speak of aspect as being distinct from tense ...

Comrie (1976, p.3) points out that one well established pedagogical technique for teaching aspectual distinction is to provide an example where, in a given sentence containing two verbs, "the first verb presents the background to some event, while that event itself is introduced by the second verb". Again using the verb *lire*, Comrie provides the following example: "*Jean lisait quand j'entrai.* John was reading when I entered." The first verb, which refers to John's reading, is in the *imparfait* and makes an explicit reference to what Comrie referred to above as the "internal temporal constituency" of the situation. The second verb, which refers to another person's entry, is in the *passé simple* and contains no reference to internal temporal constituency. In other words, John's reading is presented as an event which has been isolated at a particular time in reference to some other event; it both preceded and followed the entry of the person, and we are introduced to the act at some time while it was occurring. The person's entry, on the other hand, is presented as "a single unanalysable whole, with beginning, middle, and end rolled into one ..." (Comrie, 1976, p.4).

The notion of habituality is also important in understanding use of the *imparfait*. Comrie notes that it is often assumed that habituality is synonymous with repeated occurrences of a particular situation. Repeated occurrences of a situation may indeed constitute use of the *imparfait*, as for example in the sentence '*I used to read poetry every morning.*'/ *Chaque matin je lisais de la poésie*. However, as Comrie (1976, p.27) points out, habituality itself is not a condition for use of the *imparfait*:

> Imagine, for instance, a scene where a lecturer stands up, coughs five times, and then goes on to deliver his lecture. In English, this could be described as follows: *the lecturer stood up, coughed five times, and said ...* In French, similarly, one could express this by using the perfective Past Definite throughout: *le conférencier se leva, toussa cinq fois, et dit ...*

On the other hand, situations which are not repetitive, may indeed involve use of the *imparfait*: *Simon used to believe in ghosts/ Simon croyait aux fantômes.* The distinguishing feature of habituality, according to Comrie (1976, pp.27,28), is not the repetitiveness of the event involved, but rather, the fact that there is a description of "a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment but, precisely, as a characteristic feature of the whole period".

Apart from habituality, aspectual distinction also involves the notion of stative versus non-stative or dynamic verbs. Stative verbs are those which refer to situations which are static. At any point that one chooses to cut in on the situation, that situation will not have changed. The verb *know*, for example, is a stative verb and at any given point in the situation *'John knew where I lived'*, John's knowledge will be exactly the same. The verb *run*, on the other hand, refers to a dynamic situation; that is, a situation which varies depending upon the exact moment at which one examines it. If one says *'John was running'*, at one point in time John's foot may be touching the ground and at another moment both feet will be in the air. The use of a the progressive for the dynamic situation and the use of a non-progressive form in the stative situation is informative. Stative verbs, according to Comrie (1976,p.35) , "do not have progressive forms, since this would involve an internal contradiction between the stativity of the verb and the nonstativity essential to the progressive". However, these verbs refer to situations which involve habituality and are characteristic of an extended period of time. Thus stative verbs, such as *know* (French *savoir)*, are usually expressed in the *imparfait* in French. The English sentence *John* ***knew*** *he was speaking too quickly* is translated into English by *Jean* ***savait*** *qu'il parlait trop vite.*

In the present study all uses of the *imparfait* involve either stative verbs (e.g., *avoir, être)* or verbs which involve habituality (e.g. *attendre, se trouver).* The habitual situations involved are not repetitive, but rather, involve extended periods which are crucial to the entire situation (e.g., *Marc* ***se trouvait*** *au milieu du courant quand tout d'un coup il a perdu l'équilibre. Il a fini par arriver à la rive sans autre incident mais il était très embarassé quand il a vu Paul, moi, et surtout Louis que le* ***regardaient*** *d'un air moqueur).*

Given the subtle distinctions between the *passé composé* and *imparfait* aspects of the French verb tense system, it is not at all surprising that students in French immersion have experienced considerable difficulty in sorting out their appropriate use.

IMPLICATIONAL SCALING ANALYSIS – ELICITED IMITATION TEST

Implicational scaling refers to a technique whereby individual test items are displayed from left to right in order of their overall difficulty, and individual student scores are presented from top to bottom in order from the highest scoring student to the lowest scoring student. **Figure 3** below displays whether each student's response for the *passé* composé on the **Elicited Imitation** test was incorrect, partially correct (i.e., the student has identified the required tense but cannot produce the form accurately), or totally correct. A double asterisk indicates a totally correct response, a single asterisk a partially correct reply, and a dash indicates an incorrect answer. One would expect, therefore, that since the easiest items and the highest scoring students are located in the top left quadrant of the table, that the most double asterisks (totally correct responses) would be located there. Conversely, in the bottom right quadrant one finds the more difficult items and the lower scoring students, and one would expect to find the largest number of dashes (incorrect responses). In the upper right quadrant (harder items and higher scoring students) and the lower left quadrant (easier items and lower scoring students) one might anticipate a less predictable outcome with a combination of double asterisks, single asterisks and dashes displayed in a more random fashion. A consistent accuracy order, when compared for grade 6 and grade 8, would suggest a general systematic pattern.

The verbs have been displayed according to their overall order of accuracy; that is, when all scores for all groups were combined a global ranking was calculated. Thus, those verbs that are closest to the left side of the implicational scaling table are those which, in general, have been either partially or fully mastered first. Verbs toward the right side of the table have been, in general, partially or fully mastered last. Since this accuracy order is a global one, it is anticipated that there will be some variation within individual groups (according to grade level and program). Nonetheless, fairly consistent patterns of *passé composé* and *imparfait* use are expected. In order to facilitate reading of the text, the following abbreviations will be used when referring to the various sections of the implicational scaling tables:

UL - upper left quadrant (higher scoring students and easier items)

LL - lower left quadrant (lower scoring students and easier items).

LR - lower right quadrant (lower scoring students and harder items)

UR - upper right quadrant (higher scoring students and harder items)

Passé Composé Analyses

Within-program Analyses (Grade 6 to Grade 8)

The within-program (grade 6 and grade 8) comparisons for EFI, MFI, and LFI are strikingly similar, and a common pattern emerges for all three programs (see **Figure 3**). The higher scoring grade 6 and 8 students demonstrate a similar degree of mastery of the easier *passé composé* items (UL), higher scoring grade 6 students display partial mastery of the harder items (UR), while higher scoring grade 8 students appear to have mastered the harder items (UR). Concerning the lower scoring students, at grade 6 there is considerable inconsistency regarding both the harder and easier items (LR and LL). Some are not mastered at all, others partially mastered, and a small number fully mastered. This is not the case at grade 8, however. The lower scoring grade 8 students have for the most part fully mastered the easier items (LL) and have either partially or fully mastered the harder items (LR).

It may be seen that for all four quadrants, representing the various combinations of higher and lower scoring students as well as harder and easier items, there is evidence of greater mastery of the *passé composé* at grade 8 than at grade 6. One exception is grade 6 and 8 higher scoring students who do equally well on easier items (UL). In general, however, these results may be taken as evidence of greater mastery of the *passé composé* at grade 8 than at grade 6, confirming the global results shown in **Table 9**.

Figure 3

Implicational Scaling for Passé Composé Items on the Elicited Imitation Test by Grade Level and Type of FI Program

Grade 6 EFI

a changé	avons fait	suis allé	as deviné	avons épuisé	ont insisté	ai entendu	s'est amusé	est allée	avons été	total score
••	••	••	••	••	••	••	••	••	••	20
••	••	••	••	••	••	••	••	••	•	19
•	••	••	••	••	••	••	••	••	••	19
••	••	••	••	••	••	••	••	•	••	19
••	••	••	••	••	••	•	••	••	•	18
••	••	••	••	••	••	•	•	••	••	18
••	••	••	••	••	••	••	••	••	•	18
••	•	••	••	••	••	••	••	••	•	18
•	••	••	••	•	••	••	••	••	••	18
••	••	••	••	••	•	••	•	••	••	18
•	••	••	••	••	••	••	••	••	•	18
••	••	••	••	••	•	••	••	••	•	18
••	••	••	••	•	•	••	••	••	•	17
••	••	••	••	••	•	••	••	•	•	17
••	•	••	••	••	••	••	•	••	•	17
••	••	••	••	••	••	•	••	••	–	17
••	••	••	••	••	••	•	•	••	•	17
••	••	••	–	••	•	••	••	••	•	16
••	••	••	–	••	•	••	••	••	•	16
••	••	••	•	•	•	••	•	••	••	16
••	••	–	–	••	••	••	••	••	•	15
••	••	••	••	–	•	••	••	•	•	15
•	••	••	••	–	••	••	•	••	•	15
••	••	••	••	••	•	••	–	•	–	14
••	••	•	••	•	•	••	–	•	••	14
••	•	••	••	••	•	••	•	•	–	14
••	••	••	••	–	••	•	•	••	–	14
••	•	••	••	•	••	••	•	•	–	14
••	•	••	••	•	•	••	•	•	•	14
••	••	••	••	•	•	•	•	••	–	14
•	••	••	••	••	•	••	–	–	•	13
•	••	–	•	••	••	••	••	•	–	13
••	•	–	••	–	•	••	•	•	•	11
•	••	••	–	•	••	••	•	–	–	11
•	•	•	••	•	•	••	•	•	–	11
•	•	••	–	–	••	–	•	••	•	10

•• correct
• partially correct
– incorrect

...See next page for Grade 6 MFI

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Figure 3 (cont'd)

Grade 6 MFI

a changé	avons fait	suis allé	as deviné	avons épuisé	ont insisté	ai entendu	s'est amusé	est allée	avons été	total score
••	••	••	••	••	••	••	••	••	••	20
••	••	••	••	••	•	••	••	••	••	19
••	••	••	••	••	••	••	••	•	••	19
••	••	••	••	••	••	•	••	••	••	19
••	••	••	••	••	••	••	••	•	••	19
••	••	••	••	••	••	••	••	•	••	19
••	••	••	••	••	••	••	••	••	•	18
••	••	••	••	••	•	•	••	••	••	18
••	••	••	••	••	••	•	••	•	••	18
••	••	••	••	••	••	•	••	••	••	18
••	••	••	–	••	••	••	••	••	•	17
••	••	••	••	••	••	–	••	•	••	17
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••	••	••	••	••	•	••	–	••	•	16
••	••	•	••	••	•	••	•	••	•	16
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••	••	••	–	••	–	••	•	••	••	15
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••	••	••	–	••	•	•	••	••	•	15
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••	•	••	••	•	••	••	•	–	•	14
••	••	•	••	••	–	••	••	•	–	14
••	•	•	••	••	••	–	•	••	•	14
••	••	••	–	•	••	•	•	••	•	14
•	••	••	•	••	••	–	••	•	–	14
–	••	••	••	••	•	–	••	•	•	13
••	••	•	••	••	–	••	•	•	–	13
••	••	–	••	••	–	•	••	••	–	13
•	–	••	••	••	••	•	•	•	–	13
••	•	••	•	•	•	••	••	–	–	12
–	••	•	••	•	••	•	•	•	•	12
•	••	•	••	••	•	–	•	••	–	12
••	••	••	–	–	••	–	–	••	–	10
••	••	•	••	••	•	–	–	–	–	10
•	•	••	••	•	•	–	••	–	–	10
•	•	•	–	•	••	••	•	•	–	10
•	•	••	••	–	•	•	•	•	–	10
••	••	•	–	•	•	•	–	•	–	9
•	•	–	–	•	••	••	–	•	–	8

•• correct
• partially correct
– incorrect

...See next page for Grade 6 LFI

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Figure 3 (cont'd)

Grade 6 LFI

a changé	avons fait	suis allé	as deviné	avons épuisé	ont insisté	ai entendu	s'est amusé	est allée	avons été	total score
••	••	••	••	••	••	••	••	••	••	20
••	••	••	••	••	••	••	••	••	••	20
••	••	••	••	••	••	•	••	•	••	18
••	••	••	••	••	••	••	••	••	–	18
••	••	••	••	••	••	••	••	••	–	18
••	•	••	••	••	••	••	••	•	••	18
••	••	••	•	••	••	••	•	••	••	18
••	••	••	••	••	•	••	••	•	•	17
••	••	••	••	•	••	•	•	••	••	17
••	••	••	••	••	••	–	••	•	•	16
•	••	••	••	••	••	••	•	•	•	16
••	••	•	••	••	•	••	••	••	–	16
••	••	••	–	••	••	••	••	••	–	17
••	••	••	••	••	••	••	–	••	–	16
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••	••	••	••	••	–	•	••	–	•	14
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••	•	•	••	•	••	••	•	•	•	14
••	•	••	••	•	••	–	••	•	•	14
••	••	••	••	••	•	–	••	•	–	14
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••	•	•	••	•	•	•	••	••	–	13
••	••	–	••	•	•	•	••	••	–	13
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••	••	•	–	•	••	••	•	••	–	13
••	••	•	–	–	••	••	•	•	•	12
–	••	••	–	••	••	•	••	•	–	12
•	–	•	••	••	••	•	•	••	–	12
–	••	••	–	••	••	••	•	•	–	12
••	••	•	–	••	•	–	•	••	–	11
••	••	•	••	•	•	–	•	•	–	11
••	–	••	–	•	••	•	••	•	–	11
••	–	–	••	••	••	–	•	••	–	11
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••	•	••	–	–	••	••	•	–	–	10
••	–	••	••	–	•	••	–	•	–	10
–	•	••	–	–	••	••	•	•	•	10
•	•	•	••	–	••	•	•	•	–	10
•	•	••	•	••	•	–	–	•	–	9
–	–	–	–	–	–	••	–	–	••	4
•	–	–	–	–	•	–	–	•	–	3

•• correct
• partially correct
– incorrect

...See next page for Grade 8

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Figure 3 (cont'd)

Grade 8 EFI

a changé	avons fait	suis allé	as deviné	avons épuisé	ont insisté	ai entendu	s'est amusé	est allée	avons été	total score
••	••	••	••	••	••	••	••	••	••	20
••	••	••	••	••	••	••	••	••	••	20
••	••	••	••	••	••	••	••	•	••	19
••	••	••	••	••	••	••	••	•	••	19
••	••	••	••	••	••	••	••	•	••	19
••	••	••	••	••	••	••	••	••	•	19
••	••	••	••	••	•	••	••	••	••	19
••	••	••	••	••	••	••	••	••	•	19
•	••	••	••	••	••	••	••	••	••	19
••	••	••	••	••	••	••	••	••	–	18
••	••	••	••	••	••	••	•	••	•	18
••	••	••	••	••	••	•	••	•	••	18
••	••	••	••	•	••	••	••	•	••	18
••	••	•	••	••	••	•	•	••	••	17
••	•	••	••	••	••	••	••	•	•	17
••	••	••	••	••	•	••	•	•	••	17
••	••	•	••	••	•	•	••	••	••	17
•	••	••	••	••	••	•	•	•	••	16
•	••	•	••	•	••	••	••	•	•	15

Grade 8 MFI

a changé	avons fait	suis allé	as deviné	avons épuisé	ont insisté	ai entendu	s'est amusé	est allée	avons été	total score
••	••	••	••	••	••	••	••	••	••	20
••	••	••	••	••	••	••	••	••	••	20
••	••	••	••	••	••	••	••	••	••	20
••	••	••	••	••	••	••	••	••	••	20
••	••	••	••	••	••	••	••	•	••	19
••	••	••	••	••	•	••	••	••	••	19
••	••	••	••	••	••	•	••	••	•	18
••	••	••	••	••	••	••	••	••	–	18
•	••	•	••	••	••	••	••	•	••	17
•	•	••	••	••	•	••	••	••	••	17
••	••	••	–	••	••	•	••	••	••	17
•	•	••	••	••	••	••	••	•	•	16
•	••	••	••	••	••	••	•	•	•	16
•	•	••	•	•	•	••	••	••	•	14

••	correct
•	partially correct
–	incorrect

...See next page for Grade 8

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Figure 3 (cont'd)

Grade 8 LFI

a changé	avons fait	suis allé	as deviné	avons épuisé	ont insisté	ai entendu	s'est amusé	est allée	avons été	total score
••	••	••	••	••	••	••	••	•	••	19
••	••	••	••	•	••	••	••	••	••	19
••	••	••	••	••	••	•	••	••	••	19
••	••	••	••	••	•	••	••	••	••	19
•	••	••	••	••	••	••	••	••	••	19
••	••	••	••	••	••	••	••	••	•	19
••	••	••	••	••	••	•	•	•	••	17
••	••	••	••	••	••	•	••	••	–	17
••	••	••	••	••	•	•	•	•	••	16
••	••	•	•	••	•	••	••	••	–	15
••	••	•	••	–	•	••	•	••	••	15
•	•	••	••	••	••	••	•	••	–	15
••	••	•	••	••	•	•	••	•	•	15
••	••	•	••	••	•	•	•	••	•	15
•	•	••	••	••	•	•	••	•	•	14
•	•	•	••	•	••	••	•	•	•	13
••	•	••	••	•	•	••	–	•	•	13
••	–	••	••	••	•	•	•	–	–	11

•• correct
• partially correct
– incorrect

Across-program Analyses (EFI,MFI, and LFI)

In general, higher scoring students at grade 6 demonstrate mastery of easier items (UL) and partial or full mastery of harder items (UR). The degree of mastery tends to be greater in EFI than in MFI and greater in MFI than LFI. EFI lower scoring students display partial or full mastery of easier items but not of harder items (LL and LR). The lower scoring students have mastered or partially mastered most of the easier items (LL) and more of the harder items than either MFI or LFI students (LR).

While the grade 6 implicational scaling technique for the **Elicited Imitation** test provides data that reveal interesting trends both within grades and across programs, the grade 8 data are much less revealing due to an apparent ceiling effect. At grade 8 all students in both EFI and MFI display either full or partial mastery of both the easier and harder items. In LFI lower scoring students have not mastered the harder items (LR).

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An analysis of the four hardest items indicates that two of these require *être* as the auxiliary verb – *aller* and the pronominal verb *s'amuser*. However, while *est allée* was among the harder items, *suis allée* was one of the easier items. It may be that the linguistic context has a direct influence upon students' ability to repeat certain forms. The pronunciation of *suis allée* may be more salient than *est allée* which could be mistaken for *était*. Another difficult item is a verb that belongs to the second group and which ends in *-re : entendre*. It may be that students find the less usual past participle ending *-u: entendu* more difficult that the common *é* ending. The most difficult of all was the verb *être* itself: *avons été*. One explanation could be that students are more used to using *être* in the *imparfait*. The *passé composé* form is much less frequent. Students may also have difficulty separating the use of *être* as a past participle from its more common use as an auxiliary verb in the *passé composé*. It appears that the difficulties students experience are mainly of a morphological nature. In general, students found less common verbs from a lexical standpoint such as *deviner* and *épuiser* to be easier than the much more frequent verbs such as *s'amuser*. With the exception of *suis allée*, it appears that the required use of *être* as the auxiliary verb may contribute more to verb difficulty than frequency.

An overall pattern of development for the *passé composé* emerges which is consistent and moves from less control to more control in each program: from C (correct) to C/P (mainly correct and partially correct) to P/C (mainly partially correct and correct) to INC (incorrect) . (See **Table 10**).

Table 10
Summary of Verb Tense Accuracy for *Passé Composé* by Grade Level for EFI, MFI, and LFI

	Upper Left (easier items/ higher scores)	**Upper Right** (harder items/ higher scores)	**Lower Left** (easier items/ lower scores)	**Lower Right** (harder items/ lower scores)
Gr.6	**C**	**P/C**	**INC**	**INC**
Gr.8	**C**	**C/P**	**C/P**	**P/C**

Imparfait Analyses

In this section the patterns of use for the *imparfait* are presented. Implicational scaling tables displaying students' responses for *imparfait* items on **Elicited Imitation** test are contained in **Figure 4.**

Within-program Analyses (Grade 6 to Grade 8)

In general, grade 6 and grade 8 students display similar patterns regarding mastery of the *imparfait*. There are two exceptions to this, however. In LFI higher scoring grade 6 students display greater mastery of easier items than higher scoring grade 8 students (UL), and in MFI higher scoring grade 6 students display greater mastery of harder items (UR) than those at grade 8.

These results were not anticipated given the much lower degree of exposure to French in MFI and, particularly, in LFI.

As a result of more form focused input in LFI and MFI, better students may become more aware of the *imparfait* and are able to produce it more readily in required contexts. An alternative explanation is that these higher scoring students learn a number of these *imparfait* forms as lexical items at grade 6, but rule generalization only occurs later and has not been fully completed in grade 8. The irregular *imparfait* forms of *être: étaient* and *étions* for example, are used much more accurately than the regularly formed verbs *semblait* and *avions*. It may also be the case that *semblait* and *avons* are misheard as *semble* and *avons*, while the *imparfait* forms *étaient* and *étions* are clearly distinct from *est* and *sommes.*

If the first explanation is correct, lexical familiarity may be playing a role here. Since this is a cross-sectional study, the groups have had different language-based experiences. Much lexical content word learning is directly related to the specific experiences a learner has had with the language and can be rather arbitrary, as opposed to grammatical morphemes which are often taught and learned in a particular order.

Figure 4

Implicational Scaling for Imparfait Items on the Elicited Test by Grade Level and Type of FI Program

Grade 6 EFI

marchait	étaient	étions	semblait	avions	total score
**	**	**	**	**	10
**	**	**	**	**	10
**	**	*	**	**	9
**	**	*	**	**	9
**	**	**	**	–	8
**	**	**	**	–	8
**	**	**	–	**	8
**	**	–	**	**	8
*	**	**	**	*	8
**	**	**	**	–	8
**	**	–	**	**	8
**	**	**	**	–	8
**	**	*	**	–	7
**	**	*	**	–	7
**	**	*	**	–	7
**	**	*	**	–	7
**	**	*	**	–	7
**	**	*	**	–	7
*	**	**	**	–	7
**	**	*	**	–	7
**	**	*	–	**	7
**	**	*	**	–	7
**	**	*	**	–	7
**	**	–	**	–	6
**	**	**	–	–	6
**	**	–	**	–	6
**	**	**	–	–	6
**	**	–	–	**	6
*	**	*	**	–	6
*	**	*	**	–	6
**	**	*	–	–	5
**	**	*	–	–	5
**	**	–	–	–	4
*	**	–	–	–	3
**	–	*	–	–	3
**	–	–	–	–	2

Grade 8 EFI

marchait	étaient	étions	semblait	avions	# correct
**	**	**	**	**	10
**	**	**	**	**	10
**	**	**	**	**	10
**	**	**	**	**	10
**	**	**	**	**	10
**	**	*	**	**	9
**	**	*	**	**	9
*	**	**	*	**	8
**	**	**	**	–	8
**	**	**	**	–	8
**	**	**	–	*	7
**	**	*	–	**	7
**	**	*	**	–	7
**	**	*	**	–	7
**	**	**	–	–	7
**	*	*	**	–	6
**	**	–	**	–	6
**	–	**	–	–	4
**	**	–	–	–	4

**	totally correct response
*	partially correct
–	incorrect

...See next page for MFI

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Figure 4 (cont'd)

Grade 6 MFI

marchait	étaient	étions	semblait	avions	# correct
••	••	•	••	••	9
••	••	••	••	–	8
•	••	•	••	••	8
••	••	••	••	–	8
••	••	•	••	–	7
••	••	•	••	–	7
•	••	••	••	–	7
••	••	•	–	••	7
••	••	•	••	–	7
••	••	•	••	–	7
••	••	••	–	•	7
••	••	•	–	••	7
••	••	–	••	•	7
••	••	–	••	•	7
••	•	••	–	•	6
••	••	–	••	–	6
••	••	••	–	–	6
••	–	••	–	••	6
••	••	••	–	–	6
••	••	•	–	–	5
••	••	•	–	–	5
••	••	•	–	–	5
•	••	–	••	–	5
••	••	•	–	–	5
•	••	–	••	–	5
••	••	•	–	–	5
•	••	••	–	–	5
••	•	–	••	–	5
••	••	–	–	–	4
••	–	••	–	–	4
••	–	•	–	•	4
•	••	•	–	–	4
••	–	–	–	••	4
••	••	–	–	–	4
••	••	–	–	–	4
•	••	–	–	–	3
••	–	–	–	•	3
••	–	•	–	–	3
••	–	•	–	–	3
••	–	•	–	–	3
•	••	–	–	–	3
••	–	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
•	–	•	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
•	–	–	–	–	1

Grade 8 MFI

marchait	étaient	étions	semblait	avions	# correct
••	••	••	•	••	9
••	••	••	••	–	8
••	–	••	••	–	8
••	••	•	••	–	7
••	••	•	••	–	7
••	••	•	••	–	7
••	••	••	•	–	7
••	••	•	••	–	7
••	••	•	••	–	7
••	–	–	••	••	6
•	••	•	•	–	5
••	–	–	–	••	4
••	••	–	–	–	4
•	••	–	–	–	3

••	totally correct response
•	partially correct
–	incorrect

...See next page for LFI

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Figure 4 (cont'd)

Grade 6 LFI

marchait	étaient	étions	semblait	avions	# correct
••	••	••	••	••	10
••	••	•	••	••	9
••	–	••	••	••	8
••	••	••	–	–	6
••	••	•	•	–	6
••	••	•	–	–	5
•	••	•	–	–	5
••	–	–	••	•	5
•	–	••	–	••	5
••	–	•	–	••	5
••	–	–	–	••	4
•	–	•	••	–	4
••	–	••	–	–	4
••	••	–	–	–	4
–	•	•	–	••	4
••	–	–	••	–	4
•	••	–	–	–	3
•	–	•	–	–	2
••	–	–	–	–	2
•	•	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
••	–	–	–	–	2
–	–	–	–	••	2
•	–	–	–	–	1
•	–	–	–	–	1
•	–	–	–	–	1
•	–	–	–	–	1
•	–	–	–	–	1
•	–	–	–	–	1
•	–	–	–	–	1
•	–	–	–	–	1
•	–	–	–	–	1
•	–	–	–	–	1
•	–	–	–	–	1
–	–	–	–	–	0

Grade 8 LFI

marchait	étaient	étions	semblait	avions	# correct
••	••	•	••	–	7
••	••	•	–	••	7
•	••	•	–	••	6
•	•	•	••	–	5
•	–	••	–	••	5
•	••	–	••	–	5
•	••	–	••	–	5
••	••	•	–	–	5
••	••	–	–	–	4
•	••	–	–	•	4
••	–	••	–	–	4
••	••	–	–	–	4
•	••	–	–	–	3
••	–	•	–	–	3
•	••	–	–	–	3
•	–	–	–	–	2
••	–	–	–	–	2
•	–	–	–	–	1

••	totally correct response
•	partially correct
–	incorrect

Across-program Analyses (EFI, MFI, and LFI)

In general, at grades 6 and 8, students in EFI demonstrate greater mastery of the *imparfait* than students in MFI, and those in

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MFI greater mastery than their peers in LFI. The higher scoring EFI students at both grade levels appear to have mastered the easier items (UL) and have either partially or fully mastered many of the harder items (UR). The lower scoring EFI students have partially or fully mastered the easier items (LL), and demonstrate greater mastery of harder items than lower scoring MFI or LFI students. In this case, as was the case for the *passé composé*, an overall developmental sequence emerges from C (correct) to C/P (mainly correct and partially correct) to P/C (mainly partially correct and correct) to INC (incorrect). (See **Table 11**.)

Table 11

Summary of Verb Tense Accuracy for *Imparfait* by Grade Level and Type of FI Program

Legend: C = correct **P** = partially correct **C/P** = correct and some partially correct **P/C** = partially correct and some correct responses **INC** = mainly incorrect

	Upper Left (easier items/ higher scores)		**Upper Right** (harder items/ higher scores)		**Lower Left** (easier items/ lower scores)		**Lower Right** (harder items/ lower scores)	
	Gr.6	**Gr.8**	**Gr.6**	**Gr.8**	**Gr.6**	**Gr.8**	**Gr.6**	**Gr.8**
EFI	C	C	C/P	C	C/P	C/P	INC	INC
MFI	C/P	C/P	C/P	P/C	C/INC	C/INC	INC	INC
LFI	P/C	C/P	P/C	P/C	INC/P	P/C	INC	INC

Discussion

As noted in the introduction to this section, a consistent accuracy order, when compared for grade 6 and grade 8, would suggest a general systematic pattern of use of the *passé composé* and the *imparfait* involving 1) degree of mastery of harder items and 2) degree of mastery of easier items.

For the *passé composé*, higher scoring grade 8 students demonstrate greatest mastery of harder items, lower scoring grade 8 students and higher scoring grade 6 students display similar degrees of partial mastery, and lower scoring grade 6 students have not mastered these items. Higher scoring grade 6 and grade 8 students displayed similar mastery regarding easier items. Higher scoring grade 6 students, in fact, outperformed lower scoring grade 8 students who showed only partial mastery. The least proficient were while lower scoring grade 6 students did not master these easier items.

For the *imparfait*, the pattern for harder items contains a number of expected results. First, as expected, the higher scoring grade 8 EFI students demonstrated the greatest degree of mastery of harder items. Second, the performance of the higher scoring EFI students at grade 6 is also as one might expect given the much greater exposure these students have had to French, and their superior overall performance. There were, however, two cases where results were not as anticipated: Grade 6 MFI lower scoring students outperformed lower scoring grade 8 students on these harder items, and the grade 6 and 8 lower scoring LFI students performed better than grade 6 and grade 8 LFI higher scoring students. Given the lower amount of exposure to intensive French, especially in grade 6 LFI, and the overall weaker performance of this group, one did not expect this degree of mastery. One explanation for this may be that the difficulty of the items caused some guessing by both lower and higher scoring students. The order of mastery of easier items displays a much more consistent pattern than that of the harder items. First, the EFI higher scorers outperform the rest, while LFI lower scorers perform least well. Lower scorers in EFI are like higher scorers in grade MFI. Higher scoring LFI students are like lower scoring MFI students. It is interesting that grade level makes no difference in this order. In other words, grade 6 and grade 8 students perform similarly within each program on these easier items. An explanation for the similar results for grade 6 and 8 students may relate to the fact that these are easier items. There may be less guessing occurring here on the part of lower scoring students.

To conclude this section on implicational scaling, two important points related to this thesis are emphasized. First, there is evidence of advanced development in students' use of the *passé composé* from grade 6 to grade 8. This conclusion was drawn in a general sense from the mean scores on the verb subtests reported earlier. However, the implicational scaling technique illustrates that this is true for both lower and higher scoring learners, and for more and less difficult items not only in terms of an overall order of accuracy, but for students at the two grades in all three programs. Second, for both the *passé composé* and *imparfait* aspects of the past tense there is evidence of an order of development that is largely respected from one program to another at both grade levels. Once again, this order is respected not only generally, but is shown to reflect the difficulty of the specific items and the ability of the students involved. While a simple ranking of *passé composé* and *imparfait* items according to mean item difficulty would have provided a general order of difficulty, the preceding display of data and subsequent analysis allow the reader to see how this overall order of difficulty was determined by students at each grade in each program who achieved differing levels of success.

INTERLANGUAGE ANALYSIS – RATIONAL CLOZE TEST

In this section, a detailed comparative analysis of students' responses with the *passé composé* and the *imparfait* on the **Rational Cloze** test is undertaken. Earlier in this chapter, it was pointed out that students found the *passé composé* to be much more difficult on the written test than on the oral test.

The comparative descriptions and analyses of students use of the *imparfait* and *passé composé* that follow will be presented in two main ways. First, the data are examined from grade 6 to grade 8 within each program. These within-program data, while cross-sectional, should more closely resemble developmental tendencies than across-program data, and thus, are felt to be more informative for SLA in general. Second, the data will be examined for across-program patterns. Data examined in this way are related to the differences in total amount of exposure time and to the instructional differences found across programs. It is anticipated that, from these within and across program analyses, a general development sequence may be inferred for acquisition of the *passé composé* and *imparfait*.

As the total number of students who wrote this test was quite large (N=179), a stratified random sample of 12 students from each grade in each program (n=72) was selected in order to carry out more detailed interlanguage analysis. For selection purposes, the raw scores for each student on the **Rational Cloze** test were converted to standard (z) scores resulting in mean of 0 and a standard deviation of 1. The twelve students selected at each grade level reflected a proportional representation of scores which spanned the standard score range from -2 to +2. (See **Table 12**.)

Table 12
Numbers of Students Selected by Z-Score Range for the Rational Cloze Test Interlanguage Analysis by Grade Level and Type of FI Program

	EFI		MFI		LFI	
	Gr.6	Gr.8	Gr.6	Gr.8	Gr.6	Gr.8
Z-SCORE RANGE						
+1 – +2	2	3	4	3	3	2
0 – +1	4	3	3	3	3	4
-1 – 0	3	3	3	4	4	3
-2 – -1	3	3	2	2	2	3

A total of 16 items on the 32 item **Rational Cloze** test require students to use (select and form) either the *passé composé* or *imparfait*. (See **Table 13**). Ten of these items involve the *passé composé* – six require *avoir* as the auxiliary verb and four require *être*. Of these 10 verbs, only two have irregular past participles – *voir* and *avoir*. The remaining 6 items involve use of the *imparfait*. Three of these involve irregular formation of the *imparfait* – *avoir* and *être* (2), while the remaining three items follow a regular pattern of formation of the *imparfait*.

Table 13

List of *Passé Composé* and *Imparfait* Verbs on Rational Cloze

most
difficult
↑

Verb	Aspect	Auxiliary	Past Participle	Formation (*Imparfait*)	Anticipated Response
attendre	p.c.	avoir	regular	—	ai attendus
avoir	p.c.	avoir	irregular	—	a eu
se trouver	imp.	—	—	regular	se trouvait
descendre	p.c.	être	regular	—	sommes descendus
rentrer	p.c.	être	regular	—	est rentré
attendre	imp.	—	—	regular	attendait
sortir	p.c.	être	regular	—	suis sorti
regarder	imp.	—	—	regular	regardaient
perdre	p.c.	avoir	regular	—	a perdu
décider	p.c.	avoir	regular	—	avons décidé
finir	p.c.	avoir	regular	—	a fini
être	imp.	—	—	irregular	était
arriver	p.c.	être	regular	—	est arrivé
être	imp.	—	—	irregular	étions
avoir	imp.	—	—	regular	avions
voir	p.c.	avoir	irregular	—	a vu

↓
least
difficult

In the following section, analysis of students' use of the *passé composé* is presented. The analyses are categorized as **within-program** (grade 6 – grade 8) comparisons and **across-program** (EFI – MFI – LFI) comparisons. Students' responses are categorized as being either correct, partially correct, or incorrect, and specific examples of students' responses are provided.

Passé Composé Analyses

Within-program Analyses (Grade 6 to Grade 8)

Early French Immersion

In general, grade 6 EFI students show initial signs of some degree of control over use of the *passé composé*. (See **Table 14.**) In just over one third of the cases for the *passé composé* the correct aspect was identified, if not produced accurately. Incorrect responses for the *passé composé* in grade 6 involved use of the present tense for the most part. Partially correct *passé composé* responses involved errors with or omission of the auxiliary, use of *avoir* instead of *être*, and use of the infinitive and the present tense for the past participle. Accuracy of use with respect to the *passé composé* is still extremely low at this level.

While both grade 6 and grade 8 EFI students were able to select the *passé composé* when required to a similar degree (about one-third of the time), the grade 8 students were over twice as accurate in use of the *passé composé*. However, this accuracy is still quite low at 17%. In cases where grade 8 students were incorrect, they used the present tense (but only half as frequently as grade 6 students), and the *imparfait* to the same degree as the grade 6 students did. Partially correct *passé composé* answers mainly involved use of *avoir* in the place of *être*. Omission of the auxiliary which was common at grade 6 only occurred twice in grade 8. Difficulties with the past participle largely involved overgeneralization of the *é* ending, while use of the infinitive and present tense forms were not noted.

Correct responses

At grade 6 in EFI there were a total of eight correct responses for verbs requiring formation of the *passé composé*, all but one which took *avoir* as the auxiliary. There were 18 correct responses in this category at grade 8 EFI and 8 of these responses involved verbs requiring *être*.

Table 14

Correct, Partially Correct and Incorrect Responses for the *Passé Composé* on the Rational Cloze Test by Grade Level in EFI

	EFI	
	6	**8**
Correct Responses		
avoir auxiliary	7	10
être auxiliary	1	8
Total Correct	**8**	**18**
	6%	***15%***
Partially Correct		
aux. verb error	19	15
omission or inaccurate	10	2
avoir for *être*	9	13
past participle error	9	5
Total Partially Correct	**28**	**20**
	23%	***18%***
TOTAL (Correct+	**36**	**38**
Partially Correct)	***30%***	***32%***
Incorrect Responses		
présent	40	20
imparfait	21	21

The most frequent correct response in grade 6 EFI involved *voir*, a verb which has an irregularly formed past participle *(il **a vu**)* suggesting that this may be a lexically learned item rather than evidence of a developing process of formation of the *passé composé*. The most common correctly produced form of the *passé composé* in grade 8 EFI, however, was *arriver* which forms its past participle regularly (*quelque chose de très intéressant **est arrivé***). This was followed by the irregularly formed *il **a vu***. Students at grade 8 EFI appear to be progressing in their acquisition of the *passé composé* as a grammatical form.

Partially correct responses

Partially correct responses indicate that, when students were attempted to form the *passé composé*, they often had difficulty with either the auxiliary verb or the past participle. There were 28 partially correct responses in grade 6 EFI as compared to 20 in grade 8 EFI. This decrease in the number of partially correct responses at grade 8 EFI was balanced by the greater number of correct responses (18 versus 8). Thus, while the ability to distinguish between the use of the *imparfait* and the *passé composé* was similar in grade 6 and grade 8 EFI, grade 8 students were considerably more accurate. The combined accurate and partially correct responses on the *passé composé* in grade 8 EFI totaled 38 as compared to 36 in grade 6. Once again, the main patterns of errors involved either the auxiliary verb or the past participle or both.

Regarding the auxiliary verb, students in both grade 6 and grade 8 EFI experienced difficulty (19 errors in grade 6 and 15 in grade 8). The difference between the two grades lies, however, in the nature of these errors. In grade 6, ten of these errors were cases where the auxiliary was completely omitted (e.g., *il* ___ *fini, Je les* ___ *attendu, Paul* ___ *rentré, Quand je* ___ *sorti),* and nine involved use of *avoir* for *être*. These examples show that grade 6 EFI students had similar difficulty with verbs requiring *avoir* such as *finir, attendre* and verbs requiring *être* such as *rentrer* and *sortir*. In grade 8, only two of the 15 errors involved omission of the auxiliary verb; the rest involved use of *avoir* in the place of *être*. While the wrong auxiliary verb was used in each case, agreement with respect to number was respected at both grades: *(e.g., Paul* ***a*** *rentré, nous* ***avons*** *descendé, j'****ai*** *sorti).* This tendency to omit the auxiliary verb may in fact be a transfer from English where the simple past is often expressed by one word (e.g., Paul returned).

In cases where students attempted the *passé composé* at grade 6 EFI, there were 9 instances where they exhibited difficulties in forming the past participle. There were 5 such instances in grade 8 EFI. These instances were divided between verbs requiring *avoir* and those requiring *être* as the auxiliary. Students in grade 6 EFI, when they attempted to form the *passé composé*, tended to use a variety of erroneous forms of the past participle, including one use of the present tense (e.g., *nous avons* *descendré/descendé/descender; Nous avons décidons).* Use of the infinitive and the present tense, which were common errors in grade 8 LFI and MFI, did not appear in grade 8 EFI. The use of the most common past participle form -*é* persisted in grade 8 EFI, however, as did the influence of the noun *la vue* (*je ai sorté, il a vue.*). Again students appeared to be struggling with the intricacies and complexity of the *passé composé*. The forms *descendré/descendé/descender* suggest that students in grade 6 EFI were influenced by the much larger number of *premier groupe* French verbs which require -*é* as the auxiliary ending. Indeed, Harley and Swain (1978) note that according to Larousse (1964) 90% of all French verbs fall into the *premier groupe*, *é* past participle, category.

In terms of interlanguage development, in certain cases students demonstrated control of the auxiliary verb but difficulty with the past participle, and in other situations the past participle was correctly formed but the auxiliary verb was either missing or incorrect.

Incorrect responses

In the previous sections either correct or partially correct uses of the *passé composé* were examined. In this section the major patterns occurring when students use a form other than the anticipated one are analyzed. These fall into two major categories: use of the *imparfait* and use of the *présent* in place of the *passé composé*.

There were 40 instances where the present tense was used in place of the *passé composé* in grade 6 EFI. Use of the present tense in place of the *passé composé* in grade 8 EFI is only half as common as in grade 6, and is usually formally accurate.

Students in grade 6 and grade 8 EFI used the *imparfait* in place of the *passé composé* to the same extent. The following examples were found at both grade levels:

Je les attendais ...
... tout d'un coup il perdait l'équilibre
il finissait par arriver à la rive ...
Puis, Paul avait une excellente idée
Nous descendions au ruisseau
Finalement, Paul rentrais ...
Quand je sortais ...

In addition, students at grade 8 also produced the following:

Il était très embarassé quand il ***voyait*** *..*
Nous ***décidion*** *de nommer ce castor Louis*
l'été dernier, quelque chose de très intéressant ***arrivait***.

Thirty percent of verbs requiring conjugation in the *passé composé* were identified at grade 6 and 32 percent at grade 8 by the students selected in EFI. If one considers the fact that both grade 6 and grade 8 EFI students also used the *imparfait* in 21 situations where the *passé composé* was required, this can be interpreted as evidence for a general awareness of past tense on the part of these students. Clearly, the difficulty for these students was to distinguish between the two aspects of the past tense. Nonetheless, insofar as they were able to recognize "pastness" and used some form which reflects this awareness, these EFI students can be seen to be at a stage in interlanguage ahead of their peers in the other two programs.

Summary

A number of trends emerge for these grade 6 and 8 students' use of the *passé composé* in EFI. First, the percentage of correct responses is quite low for both groups but considerably greater in grade 8 than in grade 6 for verbs requiring *être* as the auxiliary. For verbs which take *avoir* as the auxiliary there is little difference from grade 6 to grade 8. Second, grade 6 students demonstrate considerable difficulty with omission of the auxiliary verb while this is a minor problem for students in grade 8. Grade 8 students used the *avoir* auxiliary in place of *être* much more often. Third, grade 6 students tended to recognize the need for the *passé composé* to a similar extent as grade 8 students, and were just as likely to use the *imparfait* in place of the *passé composé*. Finally, grade 8 students relied much less on the *présent* than did grade 6 students.

In terms of overall developmental sequence, the grade 6 EFI students recognized the need to use the *passé composé* similarly to their peers in grade 8 but were much less accurate. They had particular difficulty with the auxiliary verb, and relied heavily on the *présent*. The grade 8 EFI students relied less on the *présent* than the grade 6 students, and were more accurate, especially with verbs requiring *être* as the auxiliary. Students at both grade levels recognized the *imparfait* as a past tense.

Middle French Immersion

In general, grade 6 MFI students demonstrated little control over use of the *passé composé*. (See **Table 15**.) There was, in fact, only 1 correct *passé composé* response. Incorrect answers for the *passé composé* involved use of the *présent* and, to a lesser degree, the *imparfait*. With respect to partially correct *passé composé* responses, common patterns involved omitting or using an inaccurate form of the auxiliary verb, using the auxiliary verb *avoir* in place of *être*, and using either the infinitive or a present tense form of the main verb instead of the past participle.

In grade 8 MFI, the number of combined partial and correct responses for the *passé composé* was more than double that found in grade 6 MFI (and similar to the performance of grade 8 EFI). This seems to be reflected in the fact that grade 8 MFI students used the *passé composé* accurately approximately one-quarter of the time. In general, however, accurate use of the *passé composé* is quite low at both grade levels.

Table 15
Correct, Partially Correct and Incorrect Responses for the *Passé Composé* on the Rational Cloze Test by Grade Level in MFI

	MFI	
	6	**8**
Correct Responses		
avoir auxiliary	1	27
être auxiliary	0	1
Total Correct	**1**	**28**
	1%	***23%***
Partially Correct		
aux. verb error	20	22
omission or inaccurate	18	9
avoir for *être*	2	13
past participle error	7	8
Total Partially Correct	**27**	**30**
	23%	***25%***
TOTAL (Correct+ Partially Correct)	**28** ***23%***	**58** ***48%***
Incorrect Responses		
présent	57	24
imparfait	12	8

Incorrect *passé composé* responses at grade 8 MFI also involved use of the *présent* (but only half as often as in grade 6), and use of the *imparfait* (somewhat less than at grade 6). Partially correct responses included omission of the auxiliary verb, use of *avoir* in place of *être* (13 cases as opposed to 2 in grade 6), and past participle errors including use of the infinitive form. The increased use of *avoir* for *être* at grade 8 may reflect the fact while the auxiliary verb has not been mastered, students at grade 8 were able to recognize that these verbs are required in the *passé composé*. Grade 6 students were either unable to recognize the need for the *passé composé* or unable to form the past participle of these verbs.

Correct responses

At grade 6 in MFI there was only one correct response for verbs requiring formation of the *passé composé*. This single correct response involved *avoir* as the auxiliary (*il a vu*). The fact that the only correct response involved a verb which has an irregularly formed past participle suggests that this may be a lexically learned item rather than evidence of grammatical generalization regarding the *passé composé*.

In contrast, there were 28 correct responses in this category at grade 8 MFI, all but one which involved *avoir* as the auxiliary. The most common correctly produced *passé composé* verbs were *perdre* which forms its past participle regularly (*il a perdu*), and *voir* which has an irregular past participle (*il a vu*), followed by *décider (nous avons décidé)*. It is also interesting that the verb *descendre* is produced in the correct form for the first time including both the correct form of the auxiliary verb *être* and agreement with in number with the past participle (*nous sommes descendus*). There were also two "near misses" with this verb (*nous sommes descendu*) and (*nous sommes descendue*). These examples may be interpreted as evidence that grade 8 students appear to be progressing in their acquisition of the *passé composé* as a grammatical form.

Partially correct responses

There were 27 partially correct responses at grade 6 and 30 at grade 8. These responses provide evidence that the students were attempting to form the *passé composé*, but encountered difficulty with using either the auxiliary verb or the past participle. These partially correct responses at grade 8 MFI complement the correct responses and are indicative of a generally greater awareness of when to use the *passé composé* than in grade 6. The combined accurate and partially correct responses in grade 8 MFI total 58 (48%) as compared to 26 (23%) in grade 6 MFI.

With the exception of the use of the present tense, omission or inaccurate use of the auxiliary verb was the next most common problem noted in responses in these MFI classes. There were 18 separate cases where grade 6 students either omitted the auxiliary verb or were inaccurate in forming it as required: half for verbs requiring *avoir* as the auxiliary and half for those requiring *être*. At grade 8 there were only nine auxiliary verb errors, mainly errors of omission, for verbs requiring *être* and *avoir*. The following are examples of errors of omission which were found at both grade levels: *Il ___ fini; je les ___ attendu/attendé; quelque chose de très intéressant ___ arrivé.; Quand je ___ sorti ; Nous ___ décidé.*

The use of *avoir* in the place of *être* (13 cases) accounted for many more auxiliary verb problems in grade 8 MFI than in grade 6 MFI (2 cases). Uses of *avoir* for *être* found at both grade levels included the verbs *arriver* and *sortir: Quelque chose de très intéressant a arrivé; Quand j'ai sortis de la tente.* Grade 8 students used *avoir* in place of *être* for two other verbs, *rentrer* and *descendre.*

Whenever *avoir* was used in place of *être*, agreement with respect to person and number was respected at both grade levels (*quelque chose **a** arrivé, Paul **a** rentré, nous **avons** descendu*). As noted above, the greater use of the auxiliary *avoir* at the grade 8 level may reflect the fact that less present tense forms are being proffered and students are beginning to move beyond their previously heavy reliance upon that tense to accomplish various functions.

Past participle difficulties posed a similar problem for both grade 6 and grade 8 MFI students. Such difficulties occurred with 7 items in grade 6 MFI as compared to 8 in grade 6 MFI (e.g., *Je les ___ attendé/attendu; quand il a vue; Quand je suis sortie/sortis; Marc ___ rentrée*).

Difficulties in using the past participle at grade 6 MFI were divided between verbs requiring *avoir* and those requiring *être* as the auxiliary. Students at this grade tended to use a form of the past participle that was close to the anticipated form. One finds, for example, responses like (*je les ___ attendé; Paul a eut; quelque chose ... ___ arrivée; je suis sortie; Marc ___ rentrée; il a vue*). There was no evidence of use of the infinitive form (e.g., *Nous avons décider)* at this level; nor of use of the present tense in place of the past participle after the auxiliary verb (e.g., *Nous avons décidons).*

In all these cases it appears that the students are struggling with use of the *passé composé*. The form *attendé* could be a result of the influence of the *imparfait* – *attendais*, or the influence of the great majority of verbs which require *é* as the past participle ending. The irregular form *eut* may be a result of confusion between the *passé simple* and the *passé composé*. The remaining errors all reflect an overuse of the feminine forms. This may be explained by the fact that the verbs *arriver, rentrer,* and *sortir* take *être* as the auxiliary and often require the feminine agreement. It may also be the case that students are confusing nouns (*la vue, l'arrivée, la rentrée, la sortie*) with past participle forms.

Regarding interlanguage development, students either demonstrated control of the auxiliary verb and difficulty with the past participle, or correct past participle use and auxiliary verb errors or omission. Omission of the auxiliary was more common at grade 6 for both *avoir* and *être* auxiliaries, while the grade 8 MFI students tended to use *avoir* in place of *être*.

Incorrect responses

In the previous sections we have examined either correct or partially correct uses of the *passé composé*. In this section we examine the major patterns occurring when students use a form other than the anticipated one. These fall into two major categories: use of the *présent* and use of the *imparfait* in place of the *passé composé*.

There were 57 instances where the present tense was used in place of the *passé composé* in grade 6 MFI. Whether these verbs required *être* or *avoir* as the auxiliary had little effect on use of the present tense. Use of the *présent* in place of the *passé composé* in grade 8 MFI is lower than in grade 6 MFI (24 vs. 57 uses). When students in MFI used the *présent* the form was usually accurate.

In MFI, use of the *imparfait* in place of the *passé composé* was quite frequent. These grade 6 MFI students used the *imparfait* in *passé composé* contexts a total of twelve times, and those in grade 8 MFI on only 8 occasions. *Imparfait* forms were given at both grades for *attendre and avoir: Je les attendais* and *Paul avait.* One verb which was used in the *imparfait* frequently at grade 6 but not at all at grade 8 was *décider: Nous décidions ...*

While grade 6 and grade 8 MFI students were aware of the past tense in general terms, they were largely unable to distinguish between the two aspects – *imparfait* and *passé composé*. Thus, in terms of interlanguage development, one can see a pattern evolving where newly mastered forms compete in an environment of free variation. It is also interesting to note that the verb *avoir* was the most frequently used in the *imparfait* when the *passé composé* was required. The fact that this common stative verb tends to be used more frequently in the *imparfait* than in the *passé composé* may account for this. In fact, students may be employing this form more as a learned lexical item than as a deliberate use of the *imparfait.*

Summary

The percentage of correct responses was quite low for both groups but considerably greater in grade 8 than in grade 6 for verbs requiring *avoir* as the auxiliary. For verbs which take *être* as the auxiliary there was little if any difference from grade 6 to grade 8. Grade 6 students demonstrated considerable difficulty with the auxiliary verb while this was much less of a problem for students in grade 8. Grade 8 students tended to recognize the need for the *passé composé* more often than grade 6 students. Grade 8 students used the *avoir* auxiliary in place of *être* much more often. Grade 6 MFI students were more likely to use the *imparfait* in place of the *passé composé*. Finally, grade 8 students relied much less on the *présent.*

In terms of overall developmental sequence, grade 6 MFI students recognized the need to use the *passé composé* similarly to their peers in grade 8 but were much less accurate. They had particular difficulty with the auxiliary verb, and relied heavily on the *présent.* They did, at this point, demonstrate awareness of the *imparfait* as a past tense form. Grade 8 MFI students relied less on the *présent,* displayed more accuracy with respect to the *passé composé (avoir* auxiliary) , and also recognized the *imparfait* as a past tense.

Late French Immersion

In general, as was the case in EFI, grade 6 and grade 8 LFI students demonstrated some degree of control over the *passé composé.* (See **Table 16**.)

At grade 6, however, the most common pattern for incorrect responses was to use the *présent* in place of either of the required forms. Concerning partially correct *passé composé* responses, common patterns involved omitting or using an inaccurate form of the auxiliary verb, using the auxiliary verb *avoir* in place of *être,* using either the infinitive or a present tense form of the main verb instead of the past participle.

Students in grade 8 LFI used the *passé composé* when required to a similar extent as their peers in grade 6 — about one-third of the time. Grade 8 students were also clearly superior in the area of accuracy (totally correct responses) regarding use of the *passé composé* (13% in Grade 8 LFI compared to 3% in Grade 6 LFI). It is important to point out, however, that the overall level of accuracy was quite low in grade 6 and grade 8 LFI. Incorrect responses for the *passé composé* items at grade 8 involved using the *présent* (but less than half as often as at grade 6), and the *imparfait* (quite more frequently at grade 6). Partially correct *passé composé* responses at grade 8 involved omission of the auxiliary, *avoir* in place of *être,* and past participle errors including use of the infinitive form.

Table 16
Correct, Partially Correct and Incorrect Responses for the *Passé Composé* on the Rational Cloze Test by Grade Level in LFI

	LFI	
	6	**8**
Correct Responses		
avoir auxiliary	4	12
être auxiliary	0	4
Total Correct	**4**	**16**
	3%	***13%***
Partially Correct		
aux. verb error	18	19
omission or inaccurate	14	11
avoir for *être*	4	8
past participle error	10	2
Total Partially Correct	**28**	**21**
	23%	***17%***
TOTAL (Correct+ Partially Correct)	**32** ***27%***	**37** ***31%***
Incorrect Responses		
présent	63	36
imparfait	1	24

Correct responses

At grade 6 in LFI, there were a total of four correct responses for verbs requiring use of the *passé composé*. All four correct responses involved verbs that took *avoir* as the auxiliary (e.g. *nous avons décidé; il a perdu, il a vu*). At grade 8, the total number of correct responses was 16, and in addition to the correct responses found at grade 6, these involved verbs with *être* auxiliaries (e.g. *quelque chose ...est arrivé; je suis sorti*). The most common correctly produced form of the *passé composé* in grade 8 LFI, however, involved the verb *voir* which has an irregular past participle: *il a vu*. While grade 8 students appeared to be progressing in their acquisition of the *passé composé*, there is still evidence that forms presumably learned as lexical items and which occur more frequently are much more salient.

Partially correct responses

In addition to the four accurate responses in grade 6, there were 28 responses which are categorized as partially correct. This number compares with 21 partially correct responses in grade 8 (where there was an increased number of correct responses). The major difference between grade 6 and grade 8 students appears to be in the area of accuracy where grade 8 students have four times as many correct responses as their peers in grade 6. Partially correct *passé composé* responses involved difficulty using either the auxiliary verb or the past participle.

With the exception of the overuse of the present tense, difficulty in using the auxiliary verb was the greatest problem at both grade 6 and grade 8 in LFI. There were 14 such errors in grade 8, and 11 in grade 6. Omission was the major source of error, especially at grade 8 where it accounted for 9 of 10 errors. Omission of the auxiliary occurred at both grade levels with verbs which follow regular patterns of formation of the past participle, irregular patterns of formation, as well as with both auxiliaries – *avoir* and *être* (e.g., *je les ___ attendu; il ___ vu; il ___ perdu; Paul ___ rentré).*

Students in both grades tended to use *avoir* in place of *être* (4 times in grade 6 and 8 times in grade 8). While *avoir* has been improperly used in the place of *être* in these situations, in each case agreement with respect to number was respected for the auxiliary (e.g., *quelque chose de très intéressant a arriver; Marc a rentrer; Nous avons descendu* ...). Some students at grade 6 tended to use the preposition *à* in place of the auxiliary (e.g., *il à perdu; il à fini; il à vu).* From these examples it would appear that a number of students at grade 6 in LFI were not yet able to distinguish homophonous forms.

In addition to auxiliary verb difficulties at grade 6 LFI, there were ten instances where students exhibited difficulties in forming the past participle. These instances were equally divided between verbs requiring *avoir* and those requiring *être* as the auxiliary. Grade 6 students tended to use the infinitive in place of the past participle (e.g., *Nous avons décider; il a perdre; Quelque chose de très intéressant ... a arriver).* In the case of *décider* and *arriver* one could assume that students were again failing to discriminate between homophonous forms since the past participles *décidé* and *arrivé* have an identical pronunciation as their corresponding infinitives. However, this was clearly not the case with *perdre.* It may be that students simply did not know how to form the past participle for the less common ending *'re'* and simply used the infinitive but this is speculation at this stage. In contrast to the difficulties experienced at grade 6, grade 8 students only committed two errors involving use of the past participle — *attendé* for *attendu,* and *arriver* for *arrivé.*

A second pattern of *passé composé* errors involved the use of the present tense forms in place of the past participle (e.g., *Nous avons* ***décidons*** *...; Il a* ***perd*** *...; Je suis* ***sors*** *...; Marc a* ***rentre*** *...*). In these examples, the present tense form agrees in person and number with the subject, and seems to reflect the general heavy reliance upon this tense. (Apart from this specific use as an auxiliary verb, there were 63 instances in total where the present tense was used in place of the *passé composé.*)

To summarize this section on partially correct responses, students in grade 6 LFI demonstrated control of the auxiliary verb in certain situations but had trouble with the past participle, and in other situations the past participle was correctly formed but the auxiliary verb was either missing or incorrect. Both these problems seemed to occur simultaneously at grade 6 in LFI suggesting inconsistent developmental patterns at this stage. However, in grade 8, students continued to have trouble with the auxiliary verb, but appear to have mastered the past participle. A developmental pattern which emerged with respect to the *passé composé* in grade 8 LFI, therefore, was mastery of the past participle before the auxiliary.

Incorrect responses

In the previous sections we have examined either correct or partially correct uses of the *passé composé*. In this section we discuss the major patterns occurring when students used a form other than the anticipated one. These fall into two major categories: use of the *imparfait* and use of the *présent* in place of the *passé composé.*

There were, as noted above, 63 instances where the present tense was used in place of the *passé composé* in grade 6. At grade 8, this number was considerably lower – 36 uses. There was no major discrepancy between verbs requiring either *être* or *avoir* as the auxiliary.

At grade 6 in LFI the use of the *imparfait* was not common. There were in fact only two instances where students' provided this form and both involved the same verb *avoir* in the same sentence: *Puis, Paul avait/avez une excellente idée.* In the first instance, the form suggests aspectual confusion, while in the second case the student's use of the present tense suggests a problem in distinguishing homophonous forms.

At grade 8, there was a marked difference with respect to use of the *imparfait* in place of the *passé composé.* Some of the 24 separate cases where students produced this form in the improper linguistic context are listed below:

Je les attendais pendant deux heures.
... tout d'un coup, il perdait l'équilibre
... il finissait par arriver à la rive sans autre incident.
Puis, Paul avait une excellente idée.
Finalement, Paul rentrais sans avoir traversé ...
Quand je sortais de la tente le lendemain matin ...

The verb *avoir* was the single verb most frequently used in the *imparfait* at grade 8 LFI, and the only verb used in the *imparfait* at grade 6. This might suggest that, due to its frequent usage, the *imparfait* form of this verb is learned more as a lexical item – this occurred at grade 6 and became more common at grade 8. However, with respect to other verbs, grade 8 LFI students demonstrated a developing ability to recognize the need for and to form the *imparfait* correctly. The correct form-function relationship for the *imparfait* was not yet evident, however.

Summary

There was a tendency for students at grade 6 and grade 8 LFI to use that tense with which they are most familiar and most comfortable — the *présent*. In most cases where students used the *présent*, it was accurately formed. The percentage of correct responses was quite low for both groups but considerably greater in grade 8 than in grade 6 for both verbs requiring *avoir* and *être* as the auxiliary. Grade 6 LFI students demonstrated considerable difficulty with the past participle while this was a minor problem for students in grade 8. Finally, grade 8 students tended to use the *imparfait* in place of the *passé composé* fairly often while this only occurred once in grade 6. In terms of overall developmental sequence, grade 6 LFI students recognized the need to use the *passé composé* similarly to their peers in grade 8 but were less accurate. They had particular difficulty with the auxiliary verb, and relied heavily on the *présent*. They did not, at this point, demonstrate awareness of the *imparfait* as a past tense form. Grade 8 LFI students relied less on the *présent*, displayed more accuracy with respect to the *passé composé* (less difficulty with formation of the past participle), and began to recognize the *imparfait* as a past tense but were unable to use it appropriately.

Summary of Within-program Comparisons

Regarding the *passé composé*, both grade 6 and grade 8 students appeared to be similar in their ability to recognize the need for the *passé composé* in general. However, grade 8 students tended to use verbs requiring *être* as the auxiliary more frequently. The overall *passé composé* accuracy was greater at grade 8 than at grade 6 in all three programs. This greater accuracy at grade 8 may be seen as evidence of a general developmental sequence. Concerning partially correct responses, there was also evidence for a general sequence of development. At grade 6 students tended to make more errors with the auxiliary and past participle for verbs requiring *avoir*, and displayed little or no ability to use verbs requiring *être* in the *passé composé*. Grade 8 students generally had greater control over verbs requiring *avoir*, but also tended to use this auxiliary for verbs requiring *être*.

The use of the *imparfait* for the *passé composé* followed no consistent pattern. In LFI, grade 8 students were considerably more likely to do this than grade 6 students. In MFI grade 6 students tended to use the *imparfait* more often, and in EFI both grade 6 and grade 8 students used the *imparfait* in place of the *passé composé* to a similar extent. Perhaps this may become clearer after examining students' use of the *imparfait* in required contexts.

Across-Program Analyses (EFI, MFI and LFI)

While the grade 6 and grade 8 within-program comparisons for the *passé composé* provided evidence for a general pattern of development, the across-program comparisons were much less consistent. (See **Table 17**). At grade 6 students in all three programs were quite similar in all aspects of use of the *passé composé:* recognition of when the *passé composé* is required (total of correct and partially correct responses), partially correct responses (this percentage was identical in all three programs), and accurate responses.

In general, the percentage of correct and partially correct responses was quite low in all three programs at grade 6. Use of the *imparfait* in place of the *passé composé* decreased considerably from LFI to MFI, and from MFI to EFI. While grade 8 MFI students performed better than their peers in LFI with respect to use of the *passé composé*, EFI students were at a level similar to LFI. This was a consistent pattern which was also found with respect to accurate responses and partially correct responses. Use of the *imparfait* for the *passé composé* was much lower in MFI than in EFI and LFI. It would appear that MFI students are better able to determine appropriate use of the *passé composé* and *imparfait* than students in the other two programs.

Table 17

Correct, Partially Correct and Incorrect Responses for the *Passé Composé* on the Rational Cloze Test by Grade Level and Type of FI Program

	EFI		MFI		LFI	
	6	**8**	**6**	**8**	**6**	**8**
Correct Responses						
avoir auxiliary	7	10	1	27	4	12
être auxiliary	1	8	0	1	0	4
Total Correct	**8**	**18**	**1**	**28**	**4**	**16**
	6%	***15%***	***1%***	***23%***	***3%***	***13%***
Partially Correct						
aux. verb error	19	15	20	22	18	19
omission or inaccurate	10	2	18	9	14	11
avoir for *être*	9	13	2	13	4	8
past participle error	9	5	7	8	10	2
Total Partially Correct	**28**	**20**	**27**	**30**	**28**	**21**
	23%	***18%***	***23%***	***25%***	***23%***	***17%***
TOTAL (Correct + Partially Correct)	**36**	**38**	**28**	**58**	**32**	**37**
	30%	***32%***	***23%***	***48%***	***27%***	***31%***
Incorrect Responses						
présent	40	20	57	24	63	36
imparfait	21	21	12	8	1	24

In general, these across-program results for the *passé composé* tend to support the hypothesis that the written **Rational Cloze** test is a less consistent indicator of students' language competence. Two factors which may have contributed to this are the form-focused nature of the task, and the fact that this is a written verb tense exercise. While the French verb system has simplified considerably orally, written forms have remained extremely complex (Séguin, 1986), and students' differential performance on the **Elicited Imitation** and **Rational Cloze** tests may reflect this difference in oral and written competence.

Imparfait Analyses

Within-program Analyses (Grade 6 to Grade 8)

Early French Immersion

In general, as was the case for the *passé composé*, grade 6 EFI students show initial signs of some degree of control over use of the *imparfait*. (See **Table 18**.) The percentage of accurate responses at grade 6 was twice as high as the *passé composé*, but still quite low at 15%. Use of the *imparfait* was not restricted to the verbs *avoir* and *être* however. Incorrect *imparfait* responses generally involved use of the *présent*. Where partially correct *imparfait* answers were given, these involved errors related to person or number (e.g., *regardais* for *regardait*).

Table 18
Correct, Partially Correct and Incorrect Responses for the *Imparfait* on the Rational Cloze Test in EFI

	EFI	
	6	**8**
Correct Responses	11 *15%*	38 *53%*
Partially Correct Responses	15 *20%*	4 *5%*
TOTAL (Correct+ Partially Correct)	26 *35%*	42 *58%*
Incorrect Responses		
présent	37	21
passé composé	3	2

In just over one third of the cases the *imparfait* was identified, if not produced accurately. The percentage of accurate responses at grade 6 was twice as high as the *passé composé*, but still quite low at 15%. Use of the *imparfait* was not restricted to the stative verbs *avoir* and *être* however. Incorrect *imparfait* responses generally involved use of the *présent*. Where partially correct *imparfait* answers are given, these involved errors related to person or number, rather than use of a past participle form (e.g. *regardé* for *regardait*), or other homophonous spellings such as the present tense (e.g. *avez* for *avait*).

Grade 8 EFI students were considerably more effective than their peers in grade 6 at identifying the *imparfait* aspect when required, and demonstrated much more accurate *imparfait* usage. Verbs other than *être* and *avoir* were used considerably more frequently in the *imparfait* at grade 8 than at grade 6. However, both grade 8 and grade 6 EFI students used the *imparfait* in contexts that required the *passé composé* to a similar degree. Incorrect *imparfait* responses generally involved use of the *présent*. Partially correct *imparfait* answers, as at grade 6, involved errors related to person or number only.

Correct responses

At grade 6 EFI there were eleven correct (accurate) responses for verbs which were required to be formed in the *imparfait*. There were 38 correct responses involving *imparfait* items at grade 8 in EFI.

In addition to the common stative verbs *être* and *avoir (nous etions; il avait)*, the verbs *attendre* and *regarder* were also used in the imparfait at grade 6 EFI (*... Louis qui le regardais; un castor qui nous attendais)*. While *avoir* and *être* were presumably learned as lexical items, there appeared to be some evidence of a developing awareness of the *imparfait* at grade 6. This awareness became more evident at grade 8. For example, at grade 8 the pronominal verb *se trouver* was correctly used 6 times (*Marc, lui, se trouvait au milieu du courant*). The verbs *attendre* and *regarder* were also relatively frequently employed in grade 8 EFI (*il a vu ... qui le regardait; un castor qui nous attendait*). Correct responses at this level, involving the stative verbs *avoir* and *être* only, accounted for approximately 40% of all correct responses. Grade 8 EFI students displayed a growing awareness of the use of the *imparfait* with dynamic verbs, however.

Partially correct responses

In addition to the accurate forms produced above, there were 15 other instances at grade 6 and four cases at grade 8 where students provided evidence that they had successfully identified the *imparfait* as the aspect required but were unable to produce the accurate form.

In grade 6 and grade 8 errors of person and number appear to be a major problem affecting the accuracy of the written form (e.g. *il avais; ... Louis qui le regardais; un castor qui nous attendaient).* One difference here in EFI though is that one does not find other homophonous spellings which reflect the influence of the present tense or the past participle (a*vez* – *avait; regardé* – *regardait; attendé* – *attendait).*

Incorrect responses

There were 37 uses of the *présent* in grade 6 EFI, and 21 in grade 8. EFI students used the present tense accurately in terms of person and number conjugation in almost all cases.

Summary

The Grade 8 EFI students demonstrated that they were much more capable than the grade 6 students of producing correct responses, and displayed a general greater awareness of the *imparfait* as a past tense. In terms of incorrect responses, both grade 6 and grade 8 students still relied heavily upon the *présent*, with infrequent use of the *passé composé.*

Middle French Immersion

In general, as for the *passé composé*, grade 6 MFI students demonstrated little control over use of the *imparfait*. This degree of control was greater, however, at grade 8. (See **Table 19**.)

Grade 8 students were able to use the *imparfait* when required slightly less than one-third of the time, and grade 6 students were able to do so about one-quarter of the time. However, once identified as being required, accurate formation of the *imparfait* was twice as common in grade 8. Again, accurate use of the *passé composé* and the *imparfait* was quite low at both grade levels. Incorrect answers predominantly involved use of the *présent*. Partially correct responses to *imparfait* items included erroneous past participle forms (e.g., *regardé* for *regardais*), and errors of person and number.

Table 19

Correct, Partially Correct and Incorrect Responses for the *Imparfait* on the Rational Cloze Test by Grade Level in MFI

	MFI	
	6	**8**
Correct Responses	7	14
	9%	*19%*
Partially Correct Responses	11	8
	15%	*11%*
TOTAL (Correct+ Partially Correct)	18	22
	24%	*30%*
Incorrect Responses		
présent	39	27
passée composé	*0*	*3*

Correct responses

At grade 6 MFI there were seven correct (accurate) responses for verbs which were required to be formed in the *imparfait* as opposed to 14 correct responses involving *imparfait* items at grade 8 in MFI.

The only verbs correctly formed in the *imparfait* at grade 6 MFI were the stative verbs *être* and *avoir* (*Marc, lui, était dans l'eau jusqu'aux genoux; pour voir s'il avait besoin* *d'aide).* At grade 8 a similar pattern occurred where 13 of the 14 correct responses involved the verbs *avoir* and *être.* As noted above, this may be due to the fact that these are common stative verbs which often occur in the *imparfait.* It may be that students have learned these forms more as lexical items that as specific forms of the *imparfait* as such. Nonetheless, it is important to remember that these students did correctly identify the correct aspect of the past tense in these cases.

Partially correct responses

In addition to the accurate forms produced above, there were 11 other instances where grade 6 students and 8 instances where grade 8 students successfully identified the *imparfait* as the aspect required, but were unable to produce the accurate form.

Homophonous spelling errors again appeared to be influencing the written form at both grade levels. Grade 6 and grade 8 students produced forms such as *il avez; qui le regardé* and *qui nous attendé.* While at grade 6 present tense forms and past participles were used in place of the *imparfait,* Grade 8 MFI students tended to use a combination of these (*il été; Marc se trouvé)* as well as errors of person and number (*qui le regardais, qui nous attendais*). Those instances where past participle forms (*é)* are used in *imparfait* contexts are particularly hard to interpret. One plausible explanation is that students intended to use the *imparfait* but were confused by homophonous oral forms. Indeed, homophony has been shown to be a problem for both immersion students and native speakers (Harley, Cummins, Swain, & Allen, 1990). It is also true that these students did not use the past participle forms of 2nd or 3rd group verbs (e.g., *finir – fini, attendre – attendu*) in *imparfait* contexts. This may suggest that in using forms such as *été* for *était* and *regardé* for *regardait* these students were attempting to form the *imparfait* but were not able to discriminate between the homophonous forms. However, it may also be true that these forms correspond to an intended *passé composé* response on the part of the learners, or that students are not making any *imparfait/passé composé* distinction in these situations.

Incorrect responses

As was the case with the *passé composé*, the *présent* was by far the preferred form for all verbs requiring formation in the *imparfait* by these 12 grade 6 MFI students (39 times) and grade 8 students (27 times). These grade 6 MFI students were using the present tense accurately in terms of person and number conjugation in most cases. One exception was the pronominal verb *se trouver*. Grade 6 and grade 8 students demonstrated that they were similar with respect to producing correct and partially correct responses.

Summary

Grade 6 and 8 MFI students displayed similar awareness of the *imparfait* as a past tense. The level of accuracy was considerably higher in grade 8 than in grade 6 however. In terms of incorrect responses, both grade 6 and grade 8 students still relied heavily upon the *présent*, with a little use of the *passé composé* at grade 8.

Late French Immersion

In general, grade 6 and grade 8 LFI students, as was the case for the *passé composé*, demonstrated very little control over use of the *imparfait*. (See **Table 20**). The predominant pattern for incorrect responses was to use the *présent*. Accuracy was extremely low in grade 6 LFI (5%) and the small number of partially correct responses involved the verbs *être* and *avoir* only. Grade 8 students used the *imparfait* when required three times more frequently than grade 6 students, however. Grade 8 students were also clearly superior in the area of accuracy for the *imparfait* (25% versus 5%). Partially correct answers tended to involve both use of the homophonous past participle form (e.g., *regardé* for *regardait*) and errors of person and number.

Table 20

Correct, Partially Correct and Incorrect Responses for the *Imparfait* on the Rational Cloze Test by Grade Level in LFI

	LFI	
	6	**8**
Correct Responses	4 *5%*	8 *25%*
Partially Correct Responses	6 *8%*	12 *17%*
TOTAL (Correct+ Partially Correct)	10 *13%*	30 *42%*
Incorrect Responses		
présent	55	26
passée composé	*1*	*0*

Correct responses

There were only four correct responses for verbs which were required to be used in the *imparfait* in grade 6. This compares to 18 correct responses at grade 8. The only verbs correctly formed in the imparfait at grade 6 LFI were the irregular verbs *être* and *avoir (Marc, lui, était dans l'eau; il avait besoin d'aide)*. This may be due to the fact that these are common stative verbs which often occur in the *imparfait*. It may be that students have learned these forms more as lexical items that as specific forms of the *imparfait* as such. Nonetheless, it is important to remember that these students have correctly identified the correct aspect of the past tense in these cases. At grade 8, *être* and *avoir* continued to account for the large majority of uses of the *imparfait*. The pronominal verb *se trouver (Marc se trouvait au milieu du courant)* and the verb *regarder (qui le regardait)*, however, are also found in the *imparfait*.

Partially correct responses

There were 6 instances where Grade 6 LFI students had successfully identified the *imparfait* as the aspect required but were unable to produce the accurate form. Grade 8 students produced such partially correct responses twice as often – 12 times.

The only verb to be identified as requiring the *imparfait* aspect at grade 6 was the common stative verb *être (nous était/etions; Marc étais)*. At grade 8, the *imparfait* is not as restricted and one finds partially correct forms for such verbs as *regarder* and *attendre (qui le regardais; un castor qui nous attendais)*. These partially correct responses are errors of person and number, and fall in a different category than other homophonous alternatives such as *été; se trouvé* and *regardé* seen in other programs.

Incorrect responses

Incorrect responses for the *imparfait* mainly involved use of the *présent*. There was only one instance of using the *passé composé* in place of the anticipated *imparfait*, and this occurred at grade 6: *Il y avait toujours un castor qui nous avons attendons.* In contrast, there were 55 cases where Grade 6 students used the *présent* in lieu of the *imparfait*, and 26 such uses of the *présent* in grade 8.

Summary

Students again demonstrated their strong inclination to use the present tense. For the most part this tense was accurately formed. Grade 8 students demonstrated that they were much more capable of producing correct and partially correct responses. Grade 6 LFI students displayed very little awareness of the *imparfait* as a past tense compared to the grade 8 students. The level of accuracy was also considerably higher in grade 8. In terms of incorrect responses, both grade 6 and grade 8 students still relied heavily upon the *présent*, with little or no use of the *passé composé* in place of the *imparfait*.

Summary of Within-program Comparisons

In EFI and LFI grade 8 students used the *imparfait* in required contexts more often than grade 6 students. In MFI, however, grade 6 and 8 students used the *imparfait* appropriately to a similar degree. Accurate use of the *imparfait*, on the other hand, was greater at grade 8 than at grade 6 in all three programs. This may be taken as evidence of an overall developmental sequence. Regarding use of *imparfait* for the *passé composé* noted above, there may be an explanation found here. In LFI grade 8 students used the *imparfait* much more frequently than grade 6 students. This would explain the greater use of the *imparfait* for the *passé composé* noted in that program. In MFI grade 6 students used the *imparfait* in required contexts to a similar extent as grade 8 students. That they would then use this form in inappropriate contexts more than grade 8 students is quite conceivable; they are familiar with it and use it fairly often. A similar trend may be found in EFI where grade 6 students used the *imparfait* less often than grade 8 students, but still were fairly familiar with this form. They then used it inappropriately in place of the *passé composé.*

In terms of a pattern or developmental sequence, it appears that initial familiarity with the *imparfait* involved both use in appropriate and inappropriate contexts at grade 6. This was clearly not sorted out by grade 8 in any of the three programs.

Across-Program Analyses (EFI, MFI and LFI)

While the across-program results of the *passé composé* items were quite inconsistent, the *imparfait* items demonstrated a clear pattern of greater mastery from earlier starting to later starting programs. (See **Table 21**.)

This was true for both correct responses and partially correct responses at all levels except grade 8 EFI where partially correct responses were lower than in the other two programs. However, the considerably higher percentage of correct responses at this level may account for this. Use of the *présent* also was higher among later starting programs, while use of the *passé composé* for the *imparfait* was very low in all programs. One would have anticipated that, given the form-focused nature of the task, that students would have performed similarly with respect to the *passé composé* and *imparfait* items. One plausible explanation is that formation of the *passé composé* is more complex requiring two types of auxiliary verbs taking different person and number forms, and different past participle forms involving agreement of number in some cases. The *imparfait* appears to be formally 'learnable' in Krashen's terms, while the *passé composé* is less so due to its complexity. It may also be the case that a number of the *imparfait* items, particularly common stative verbs such as *être* and *avoir* were learned as lexical items.

Table 21
Correct, Partially Correct and Incorrect Responses for the *Imparfait* on the Rational Cloze Test by Grade Level and Type of FI Program

	EFI		**MFI**		**LFI**	
	6	**8**	**6**	**8**	**6**	**8**
Correct Responses	11 *15%*	38 *53%*	7 *9%*	14 *19%*	4 *5%*	18 *25%*
Partially Correct Responses	15 *20%*	4 *5%*	11 *15%*	8 *11%*	6 *8%*	12 *17%*
TOTAL (Correct + Partially Correct)	26 *35%*	42 *58%*	18 *24%*	22 *30%*	10 *13%*	30 *42%*
Incorrect Responses						
présent	37	21	39	27	55	26
imparfait	3	2	0	3	1	0

Discussion

Despite a considerable degree of variation and overlap from grade 6 to grade 8 and across all three programs, it is possible to infer a general sequence of development for the *passé composé* and the *imparfait* on the **Rational Cloze** test. (See **Table 22**.) This sequence reflects the frequency of occurrence of the various elements involved in the preceding analysis. Where that frequency of occurrence refers to correct or partially correct responses, it is tantamount to an order of accuracy. The first pattern presented is use of the *présent* for both the *passé composé* and *imparfait*. This was by far the most common pattern at both grade levels and in all three programs. The last pattern listed, correct use of the *imparfait*, was the least frequent occurrence and was restricted to grade 8 EFI. The remaining patterns reflect varying degrees of frequency according to their order of listing. Most frequent occurrences were found at the beginning, and less frequent patterns toward the end of the list. The juxtaposed columns indicate when *passé composé* and *imparfait* features appeared in relation to one another. It is important to recognize that there is considerable variation in this sequence for individual students and specific groups. This is not intended to represent a rigid order of acquisition, but rather, an indication of an overall order of appearance of various form-function relationships.

Table 22

General Sequence for Written Use of *Passé Composé* and *Imparfait* on the Rational Cloze Test

Passé Composé	***Imparfait***
1. Incorrect	**1. Incorrect**
Présent	*Présent*
Imparfait	*Présent*
2. Partially correct *(avoir)*	**2. Incorrect**
omission of auxiliary	*Présent*
past participle errors:	
infinitive or present tense over generalization of é	
3. Correct *(avoir)*	**3. Partially correct *(avoir/être)***
common irregular verbs *(voir)*	homophonous spelling*
1st group verbs *(regarder)*	past participle forms *(été* for *était)*
2nd/3rd group verbs *(finir/attendre)*	errors of person *(avait* for *avais)*
4. Partially correct *(être)*	**4. Partially correct (verbs other than *être/avoir)***
	homophonous spelling
avoir for *être*	past participle forms
omission of auxiliary	errors of person and number
	regardais for *regardait/regardaient)*
5. Partially correct *(être)*	**5. Correct *(avoir/être)***
6. Correct *(être)*	**6. Correct *(avoir/être)***
7. ——	**7. Correct (verbs other than *avoir/être)***

***While homophonous spelling could be used to describe errors of person and number and use of past participle forms for the *imparfait*, it is restricted here to indicate other homophonous alternatives such as the present tense (eg., *avez* for *avait)* and infinitive forms (eg., *regarder* for *regardé* or *regardait)*.**

Regarding the first pattern, use of the *présent* for both the *passé composé* and *imparfait*, there was a considerable degree of overlap between grades and among programs. Use of the *présent* did decline in grade 8 in all three programs, particularly in MFI and EFI. Use of the *imparfait* for the *passé composé*, while less frequent than the *présent*, is common at all levels except grade 6 LFI. The second pattern which emerged was use of the *passé composé* (*avoir* auxiliary) with little accuracy. There were two major sources of error – omission of the auxiliary verb and incorrect formation of the past participle. The general pattern was that the auxiliary verb caused considerable difficulty for all groups. The infinitive was less problematic but was a source of error for grade 6 students in all three programs and for grade 8 MFI students. Grade 8 LFI and EFI students had considerably less difficulty forming the past participle. Grade 8 EFI students were the only group which tended to over generalize the past participle form, rather than use the infinitive or present tense as was the case with other groups.

Third, correct *passé composé* use was largely restricted to those verbs requiring *avoir* as the auxiliary in all grade levels and programs, with the exception of grade 8 EFI. At grade 6 in all programs this accurate use was predominantly found with irregular verbs. At grade 8 in all three programs there was a more balanced use of regular and irregular forms. At approximately the same time, partially correct use of the *imparfait* with the stative verbs *imparfait* and *être* was noted. The *imparfait* was restricted to the verbs *avoir* and *être* in grade 6 LFI and MFI, and in grade 8 MFI. Regarding partially correct uses of *avoir* and *être* in the *imparfait*, Grade 6 LFI and MFI tended to resort to homophonous spellings, while grade 8 MFI students produced the past participle form and errors of person and number. Grade 8 MFI students demonstrated the most consistent partially correct use of this form.

Fourth, partially correct use of the *passé composé* with verbs requiring *être* mainly occurred at grade 6 in EFI and grade 8 in MFI and EFI. For all three groups, either the *être* auxiliary was omitted or, *avoir* was used in its place. Corresponding to this was partially correct use of the *imparfait* with dynamic verbs. Use of the *imparfait* extended to verbs other than *avoir* and *être* in grade 6 EFI and grade 8 LFI and EFI. Grade 6 EFI students tended to produce homophonous spellings, while grade 8 LFI and EFI students tended to produce mainly past participle errors (*é* for *-ait, -aient*) and errors of person and number. Grade 8 EFI students were the only group to show any control over this form.

Fifth, regarding correct use of the *imparfait* with the stative verbs *avoir* and *être*, grade 8 LFI and MFI students demonstrated the most accuracy.

Sixth, correct use of the *passé composé* with *être* was almost exclusively restricted to grade 8 EFI, and involved only regular verbs of the first group. Isolated instances of correct third group verbs were found (e.g., *nous sommes descendus*) but there was no distinct pattern which emerged.

Seventh, and finally, correct use of dynamic *imparfait* verbs, clearly the most difficult step, was restricted to students in grade 8 EFI.

Conclusion

As noted in Chapter Two, a fundamental concept related to the route of acquisition, and to sequence of development in SLA, is that of interlanguage (Selinker, 1972) wherein the L2 performance of learners at any given point is considered to be a reflection of their existing rule systems. The stages of development through which learners pass in SLA are seen to follow a predetermined order. More recently, Ellis (1986) has noted that learners' performance may vary depending upon the situational and linguistic context, or upon individual factors such as age, aptitude, intelligence, and cognitive style. Therefore, while SLA is characterized by certain broad stages that learners pass through, the order of development varies in details. According to interlanguage theory, errors are evidence of a learner's active contribution to SLA (Ellis, 1986). Consequently, the relationship between language forms and functions that exists at various stages of development become extremely important in understanding the process of SLA.

The results and discussion of two distinct types of analysis were presented in this section, each of which provides important information concerning the interlanguage system of French immersion students. The first technique, implicational scaling, involved the **Elicited Imitation** test and demonstrated that on a task where students were more focused on the message than on the form of language, one finds a consistent pattern of development both overall and for the different groups involved. Essentially, factors such as program treatment and varied starting ages for intensive exposure to French had little or no effect on the developmental sequence that students showed.

The second technique, an analysis of patterns of language use involved the **Rational Cloze** test. On this test, where students were more focused on language form, it was demonstrated that for *passé composé* items, the more complex form, there was a less consistent order of mastery of specific verb tenses by students in different programs. Essentially, factors such as age of initial exposure to intensive French and different program treatments do appear to have an effect when the task requires students to focus on language form. For the *imparfait* items, the less complex of the two, the order was very consistent, however, and was more like what one would expect on the **Elicited Imitation** test. Despite the differences found in the patterns for different groups on the **Rational Cloze** test, it was possible, nonetheless, to infer an overall developmental sequence for both the *passé composé* and the *imparfait*.

In sum, these results are viewed as being consistent with the notion of interlanguage. Any discussion of sequence of development concerning second language acquisition must include reference to the nature of the task and the nature of the learner, including such factors as focus on form or message, the learners' age of initial exposure to language, the total amount of such exposure, and the instructional treatment that learners receive in different program variants.

Chapter Five

Discussion and Conclusion

Chapter Two of this thesis included discussion of a number of theoretical perspectives concerning both the rate and route of SLA with specific reference to verb tense development. Specifically, the question of whether a sensitive period for SLA actually exists, or whether there are different sensitive periods for different aspects of L2 development such as phonology or morphology and syntax was also explored. Empirical research conducted to test the sensitive period concept provided evidence in favour of or contrary to the various theoretical positions which were advanced. In this final chapter, these empirical findings are re-examined with reference to those of the present study of students' acquisition of basic French verb tenses. The various theoretical positions presented in Chapter Two are then reconsidered in light of new evidence which supports or fails to support them.

Neurological Factors

Certain theorists (Lenneberg, 1967; Penfield & Roberts, 1959) argued that puberty represents a cut-off point or 'critical period' for native-like acquisition of a second language. As noted at the outset, there is considerable controversy about why the ability to acquire language appears to diminish at puberty, and whether this has any pertinence for SLA. It was also noted that a number of related hypotheses suggest multiple critical periods for different aspects of SLA – phonetics, syntax, lexis, and so on. The fundamental question, then, is the following: Does the empirical evidence of the present study support the notion of a maturationally-based critical period for SLA? This involves a direct examination of both the rate and the route of acquisition.

In this cross-sectional study, the rate of acquisition of students in EFI, MFI, and LFI is examined by comparing the attainment of students in all three programs at a fixed point in time. The most meaningful comparison of this sort would occur at the end of schooling. In that way, students' ultimate attainment in the L2 could be examined as a function of starting age in order to determine if the rate of acquisition was faster in one program or another. Since data are only available for students at the end of grade 6 and grade 8, one cannot make any substantial conclusions regarding ultimate attainment and rate of acquisition. However, the results of this study do indicated that, on the written, form-focused **Rational Cloze** test, students in two later starting programs (grade 6 LFI and grade 8 MFI) achieved at a level comparable to peers in an earlier starting program. This is indicative of a faster rate of acquisition by students in the classes selected from these two programs as far as this sort of task is concerned. (The grade 8 MFI students were the only later starting group to perform similarly to students from an earlier starting group on the more meaning-focused, oral **Elicited Imitation** test). This finding, that later starting learners demonstrate early and rapid progress on more formal, analytic tasks, is consistent with the findings of a number of other studies cited at various points including several which were conducted among classroom learners (e.g., Swain, 1981; Lapkin & Swain, 1985; Harley, 1986, 1992a; McVey, Bonyunn, Dicks, & Dionne, 1990; Johnson, 1992). This advantage may also be a consequence of the intensity and total amount of exposure to the L2, as well as differences in instructional techniques found in the different programs. However, it is important to recognize also that the number of classes studied was limited, and these results may not be generalizable to all classes in these or other programs.

Regarding the route of acquisition, the present study is more informative. The critical period hypothesis predicts that the route of L2 acquisition will be less natural in post-pubescent learners (e.g., Lenneberg, 1967; Felix, 1981). It should be kept in mind that all the subjects involved in this study are considered to be at or around puberty. While all students had been exposed to French before puberty (core French in the case of MFI and LFI), initial *intensive* exposure to French began at or around puberty for the LFI students only. EFI and MFI students received intensive French instruction before puberty – at ages 6 and 9 respectively.

The findings indicate that, for the oral **Elicited Imitation** test which was more focused on message, the order of accuracy was consistent across all three programs: *présent* > *passé composé* > *imparfait* > *futur*. With the exception of the *imparfait* which was not included, this order was seen to be the similar to that reported by Harley (1986). Insofar as this order appears to be consistent from grade 6 to grade 8 and from earlier starting to later starting programs, it may be interpreted to represent an order of development that one might expect for L2 learning in a naturalistic environment. However, any conclusions regarding a natural order must be qualified as being tentative. This issue would require further study in a much larger number of French immersion instructional settings before one could make any justifiable claims in this regard. Nonetheless, on the more form-focused, written **Rational Cloze** test, the order of accuracy for basic French verb tenses was much less predictable for students in all three programs and at both grade levels.

As was the case regarding the rate of acquisition, these process-related findings cannot be perceived as evidence in favour of a maturationally-based critical period hypothesis. Indeed, the similar order of accuracy on the more message-focused, oral task tends to suggest that puberty has little influence on the process of SLA in French immersion. With respect to the variant order on the more form-focused, written task, it may be that students in all three programs at both grades have been exposed to varying degrees of focused input, particularly in the written form. This issue will be examined in greater detail in a subsequent section.

Cognitive Factors

As discussed earlier, a number of scholars have expressed concern about the existence of a neurological critical period (e.g., Genesee, 1978; Lamendella, 1977; Whitaker et al., 1981). However, the notion of a sensitive period has been proposed in cognitively-based arguments which also involve the period at or around puberty. In this version of the critical period it is the emergence of formal operations (Inhelder & Piaget, 1964) which is seen as the crucial variable. Some researchers claim that learners' more advanced cognitive abilities work against their natural ability to acquire language. Krashen (1977, 1978, 1981, 1985) in his "Monitor Model" has been perhaps the most influential of language educators who make this claim. Others (e.g., Cummins, 1983; McLaughlin, 1984) argue that the older, more cognitively mature learner can learn certain aspects of the L2 more efficiently, particularly in academic settings. The *Monitor Model* and arguments in favour of the older learner are examined separately below with respect to the empirical evidence found in the present study.

The Monitor Model

As noted in Chapter One, Krashen's 'Monitor Model' and particularly the 'Monitor hypothesis' (1985) contain a number of predictions for learners who begin L2 acquisition prior to or beyond puberty. According to Krashen, adolescents gain access to what he calls the 'monitor' with the arrival of the Piagetian stage of formal operations around puberty. Krashen defines the 'monitor' as an editor of linguistic output which is involved in *learning* (the conscious representation of linguistic rules), but which has no role to play in *acquisition* (the unconscious process of picking up a language in communicative settings where the focus is on the message or content and not on language form). Krashen maintains that there are three conditions involved in use of the 'monitor': 1) focus on language form; 2) knowledge of the pertinent grammatical rule, and 3) sufficient time to access and apply that rule. Krashen argues that in situations where the 'monitor' does not come into play, performance based on *acquired* rather than *learned* knowledge will be similar for earlier and later starting learners, reflecting the same underlying process of acquisition or route of development. This, according to Krashen, will be demonstrated by a similar order of accuracy for L2 structures. Reliance upon the 'monitor' will also result in initial rapid gains for later-starting learners, but in the long run the earlier starting learners will be ahead.

Krashen's notion of monitored performance provides a possible explanation of findings in the present study. Regarding the route of acquisition, the order of accuracy for all verb tenses is consistent for all three groups on the more message-focused, oral **Elicited Imitation** test. This consistent order may be viewed as evidence for a natural developmental sequence. On the more form-focused, written **Rational Cloze** test, which allows learners more time to access and apply the pertinent grammatical rule, the order of accuracy is different from that found on the **Elicited Imitation** test. Concerning the rate of acquisition, the achievement of later starting LFI learners by the end of grade 6 was very close to that of MFI and LFI students, suggesting that these students may be accessing the 'monitor' to attain a level of performance that they would not reach in more naturalistic settings. While students in EFI and MFI have also reached the end of the sensitive period, the LFI students have much less total exposure to the L2 and seem to be relying upon more formal processes to arrive at similar levels of performance as their peers in earlier starting programs. Indeed, the results of the exploratory classroom observation study conducted in the context of this research (Dicks, 1992) suggest that analytic teaching practices in the LFI classes involved, combined with the students advanced levels of cognitive maturity and L1 literacy upon entering the program, may have contributed to those students' high level of attainment. As for the question of eventual attainment, this cannot be answered given that the present study was restricted to grade 6 and grade 8 learners.

Other Cognitively-based Factors

Apart from those like Krashen who see an overall advantage for younger starting learners, are those who predict a general greater degree of efficiency for older-starting learners regarding morphology and syntax (Ausubel, 1964; Ervin-Tripp, 1974; McLaughlin, 1987,1990). In the present study, the question of whether an earlier or later start is more effective, is complicated by the fact that the earlier starting learners consistently have more total exposure to the L2 than the later starting learners. Therefore, one can only examine the relative performance of later starting learners and consider such factors as the degree of difference in mastery from grade 6 to grade 8 within each program, or from LFI to MFI to EFI at a specific grade level.

The cognitively-based arguments proffered in favour of later-starting learners do not seem to hold for the message-focused **Elicited Imitation** test. On this test later-starting learners were only able to perform similarly to earlier starting learners one case out of four. However, since earlier starting learners have also benefited from greater total exposure to the L2, it is difficult to isolate the importance of the cognitive factor. On the more form-focused **Rational Cloze** test, however, two groups of later-starting learners outperformed earlier-starting learners (at grade 6 LFI students outperformed MFI students and at grade 8 MFI students outperformed EFI students). These findings are consistent with those of other empirical studies (e.g. Swain, 1981; Ervin-Tripp, 1974) and lend support to Cummins' (1983) arguments regarding the difficulty of "context-reduced, cognitively demanding" tasks usually associated with instructional settings.

Essentially, time distinctions and the requirements for accuracy that accompany the written form are perceived to be cognitively demanding tasks that students are able to approach with success at puberty. There are no pre-pubescent subjects in the present study to use as a a comparison group, but the surprising performance of grade 6 LFI and grade 8 MFI students suggests that something other than total amount and intensity of exposure may account for these findings. One potential source of explanation could reside in the teachers and students themselves. There may be a 'teacher effect' which could account for these findings. Similarly, differences in student motivation or aptitude may also be contributing to the discrepancy in results. However, it can also be argued that these students' advanced cognitive ability combined with more analytic instructional approaches in the later starting programs result in superior performance on tasks where students have time to access and apply explicit grammatical knowledge. This possible explanation leads us directly to the third theoretical perspective, that of the effects of instructional approaches.

Instructional Settings and Input-related Factors

At various points in the discussions above, the role of instructional approaches has surfaced as being an important factor in interpretation of the results. In Chapter Two, the instructional arguments were seen to include the amount, intensity, and type of instruction that students receive in different L2 learning environments. Starting age was seen to be a variable in this regard, but only insofar as the earlier one begins to learn an L2 the more time one has to benefit from effective instruction. These benefits include time and opportunity for spontaneous use of the L2 for early starting learners (Swain, 1981), and initial rapid gains for later starting learners who use formal instruction as a means of acquiring explicit grammatical knowledge, which, in turn, they make automatic through practice (Bialystok, 1981; Sharwood-Smith, 1981; McLaughlin 1987).

In terms of the straightforward relationship between total amount of exposure time and effective instruction, it should be noted that grade 8 students in all three programs outperform grade 6 students on both the **Elicited Imitation** and **Rational Cloze** tests. Regardless of the age at which learners first received intensive exposure to French — 5 years in EFI, 9 years in MFI and 11 years in LFI — students at grade 8 consistently outperform grade 6 students in the same program. This seems to lend support to the argument proposed by Carroll (1969) that time is indeed the crucial variable. However, this is so only when starting age and type of program are held constant. If one compares results for students across programs, one finds a progression in terms of total hours of exposure to French from grade 6 LFI to 8 LFI to 6 MFI to 8 MFI to 6 EFI to 8 EFI. However, mastery on both the **Elicited Imitation** and **Rational Cloze** tests does not consistently reflect the number of hours of exposure.

As may be seen, students with more total hours of instruction perform less well than those with fewer total hours of instruction in a number of instances: grade 6 MFI and EFI on the **Elicited Imitation**, and grade 6 MFI and EFI, and grade 8 EFI on the **Rational Cloze** test. That four of these five cases involve grade 6 students may be important. One possible explanation is that, despite the total number of hours of instruction, age does have an effect. This raises the possibility that instructional factors including the curriculum content at grade 8 may advantage these students. This indicates that Carroll's simple assertion regarding time is not be tenable.

Table 23

Total Hours of Exposure by Program and Mean Score Test Results for the Elicited Imitation and Rational Cloze Tests by Grade Level and Type of FI Program

	Total Hrs. of Exposure	**Results**	
		Elicited Imitation	**Rational Cloze**
Gr.6 LFI	1590	36.1	18.5
Gr.8 LFI	2490	43.4	24.0
Gr.6 MFI	2610	40.9	17.4
Gr.8 MFI	3510	49.8	31.5
GR.6 EFI	4680	45.9	22.6
Gr.8 EFI	5580	53.0	32.7

In fact, in the context of the present study, the question time and age issue is more complex. Instead of examining total amount of exposure to the second language, the question is whether the different program variants with their different entry points (starting ages) use effective pedagogical means to maximize the efficiency of SLA. In other words, despite the relative disadvantage seen for grade 6 students above, are teachers in all programs using pedagogical techniques that maximize students' L2 performance, keeping in mind their L1 literacy, cognitive maturity, and L2 fluency?

Fortunately, it was possible as discussed in Chapter Two to observe French language arts lessons in selected classes in the three programs involved in this study. However, these observations were restricted to two visits per class (with the exception of one class which was observed only once) and should not be interpreted to be necessarily reflective of these classes or other classes in these programs. If these preliminary observations are accurate, however, the results of the present study tend to support the position that the type of instruction provided in the various program alternatives may have had an effect on the SLA of the three groups involved. In EFI, first of all, it was observed that 47% of all pedagogical features were experiential, reflecting a more communicative, message-oriented type of instruction. These instructional techniques involved use of authentic materials, opportunities for extended discourse, and considerable group interaction. It may be assumed that this pedagogical profile may have had a positive effect on EFI students' ability to perform best on the more message-focused **Elicited Imitation** task. It is also likely that this instructional profile in EFI is a consequence of the earlier start that these students had. Since fluency in the L2 is developed rapidly in EFI, teachers in later years appear to continue to build upon this strength in more communicative approaches to instruction. It should also be noted that the grade 8 MFI group performed similarly to the grade 8 EFI group on the **Elicited Imitation** test. This result suggests that students in that program may also have benefited from more experiential L2 learning situations, as well as from a greater total amount of exposure to the L2 than students in grade 8 LFI and students in grade 6.

On the more form-focused, written **Rational Cloze** test, the grade 6 LFI students perform slightly better than the earlier-starting grade 6 MFI students. Once again, the grade 8 MFI students perform similarly to their peers in grade 8 EFI. The higher percentage of analytic features noted in grade 6 LFI may, in part, explain why students in a later starting program are able to perform relatively well on the **Rational Cloze** test.

The results of these preliminary classroom observations in these classes suggest that these test results may be related to specific pedagogical practices which were more common in one program than another. Essentially, instructional arguments may be seen to be quite important contributions to our understanding of the rate and route of SLA. First, if instructional factors are held relatively constant (i.e., starting age, total cumulative hours of exposure, intensity of exposure, pedagogical approaches), it may be argued that the total amount of time is a crucial factor in SLA. This is supported by the superior performance of grade 8 students over grade 6 students within each of the program alternatives. Second, if one does not control for such factors, the total amount of exposure may not be the deciding factor. In several situations where students who had more total cumulative hours of exposure did not perform better than those with less exposure. In other words, factors such as starting age, first language literacy, intensity of exposure, and pedagogical treatment may be seen to be intervening variables in the process of SLA in instructional settings. Third, the pedagogical treatment that students receive may be related to the type of French immersion program in which those students are enrolled, and may have an effect on those students' performance on both analytic and experiential language tasks. When age of testing is held constant, students in programs which appear to be predominantly analytic tend to perform well on form-focused tasks, and those in more experientially-based programs perform better on message-focused tasks.

It is important to reiterate, however, that the results of these classroom observations are based on only two observations each in 13 classes and one observation in another class. While these results provide an initial indication of possible patterns, they require a thorough follow-up study in order to be substantiated.

Affective, Social, and Psychological Factors

Certain researchers have maintained that success and failure in SLA can be attributed to affective factors including motivation, self-confidence, and anxiety which are related to the onset of formal operations (Taylor, 1974; Krashen, 1982). Essentially, with the arrival of puberty, L2 learners become less effective because of heightened degrees of self-consciousness and anxiety. The results of the present study cannot be perceived to either support or fail to support this position.

One obvious problem is that, at each grade level, all the subjects involved in each program were approximately of the same age. The oldest group, the grade 8 students, were all nearly fourteen years old and the grade 6 students were all approximately 12 years old. If there were a problem with affective factors, one would expect this to occur in all three programs. This is impossible to determine.

The performance of one grade 8 MFI class, however, suggests that this group may be achieving at a superior level for factors other than those which were controlled in this study. While this class was chosen because of similar standardized test scores as others at grade 8, the performance of this group was quite unlike that of other classes. It may be in this case that affective variables such as motivation or class dynamics played an important role in the outcome. Once again, however, this is not possible to determine.

Educational Implications

The findings from the present study of students' acquisition of basic French verb tenses have a number of implications for program development and classroom practice in French immersion.

General Program Effectiveness

The study provides educators with evidence that, within each program, grade 8 students consistently outperform grade 6 students on both experiential and analytical tasks. This may be interpreted as evidence that all three program alternatives are working effectively, and should reassure educators who may be concerned about whether later-starting programs are able to provide students with a successful L2 learning experience.

Analytic and Experiential Elements in FI Classrooms

Earlier-starting students outperform later starting students consistently at grade 6 and in two of three cases at grade 8 on the **Elicited Imitation** test. This suggests that students who have an earlier start and more total exposure to the second language have an advantage over peers of the same age on more message-focused, oral tasks. The less consistent advantage for the earlier starting learners on the **Rational Cloze** test may be interpreted as evidence that an early start is not as important for more analytic, written language tasks. These findings may be related to those of the classroom observation study (Dicks, 1992) which was conducted in the context of this research and is described in Chapter Two.

Essentially, activities at the classroom level may be seen to be related to students' performance. In the LFI classes observed, for example, teachers tended to engage students in more analytic activities at grade 6 and grade 8 than was the case in MFI or EFI. Conversely, the EFI classes observed generally involved more experiential, fluency-based activities than did the LFI classes. These findings may reflect the need for a variety of approaches and a varying degree of emphasis on one approach or another depending on the nature of the students and the task. LFI students in this study appeared to have benefited from more form-focused, analytic language practise as far as their results on the **Rational Cloze** test were concerned. EFI and MFI students, on the other hand, were clearly superior to LFI students on the more message-focused **Elicited Imitation** task. An important implication here is that teachers should use that approach which is best suited to the specific task and the maturity and language abilities of the students. No one approach is effective in all situations and some combination of experiential and analytic approaches should be used in all situations. Educators could use such information to determine if pedagogical practices need to be altered somewhat in one program alternative or another, or if specific pedagogical materials need to be developed for a particular program to enhance one aspect or another of students' language ability. A basic question, however, remains: "How does one maximize the use of experiential and analytic teaching strategies in French immersion settings?"

Harley (1993) notes that experiential teaching strategies provide students with a crucial focus upon meaning, exposure to authentic language, and opportunities to engage in topics and themes which are interesting and important to them. Experiential strategies are seen to be motivational and this is perceived to be particularly important in French immersion settings where students are usually not exposed to learning the L2 in natural situations which are intrinsically motivational. Harley goes on to point out, however, that focus on message and authentic language use alone may not provide the optimal conditions for SLA in instructional settings. The range of vocabulary, the types of discourse, and the nature of the input (teacher-talk) in French immersion classrooms may all in some ways be restricted and unlike those of naturalistic language learning situations. Teachers in French immersion, much like teachers in English classrooms, tend to do most of the talking and students have few sustained opportunities to use the L2. Thus, while experiential strategies may provide a number of crucial elements for successful SLA, message-focused classroom approaches alone do not appear to be sufficient.

In order to enhance experiential language learning strategies, analytic strategies may be used for a number of specific purposes. One common feature of experiential strategies is the tendency for learners to rely upon holistic or top-down processing. This was seen earlier in the discussion regarding oral and written L2 tasks (Johnson, 1992). Students who are fully or largely focused upon the meaning or context, may not be aware of specific L2 features. Harley (1993, p.248) argues that "a major function of analytic teaching can thus be seen as one of making features of the L2 more salient for learners who might otherwise fail to notice them." One particular way in which analytic approaches may be combined with experiential approaches is to provide students opportunities to produce the L2, and to do so in such a way that there is a meaningful transfer of information, and that this transfer is done accurately.

In discussing an experiment designed to examine the effectiveness of analytic teaching strategies in French immersion programs, Allen, Swain, Harley, and Cummins (1990) describe oral and written materials designed to provide students with focused input on the use of the *passé composé* and *imparfait*. This experiment had three main goals: "(1) to establish the different meanings of the *imparfait* and *passé composé* ; (2) to integrate this grammar teaching with the teaching of worthwhile content and with the personal experience of the students; and (3) to demonstrate a functional approach to grammar teaching in an immersion context that could be applied to other linguistic content." (Allen et al, 1990, pp. 68-69). The results of this experiment showed that while there were immediate benefits to students exposed to the experimental treatment, after three months post-testing revealed no significant differences between the experimental and control groups. However, the authors point out that in several instances the teaching approaches used did not maximize the full potential of the materials, and that in the class where students' attention was consistently drawn to language form while doing content oriented activities, the largest gains were made. The results of the study, while not conclusive, were interpreted by the researchers as evidence that motivating materials that deal with topics of interest to students and that focus on language form can accelerate grammatical development.

The experiment described above represents one example of teaching strategies which engage students in a focus on the relationship between form and meaning. In order for students to become more aware of this critical element of language, they may require opportunities for what Swain (1985) referred to as 'comprehensible output'; that is, opportunities to produce and listen to language, and to receive feedback so that they can develop their understanding of the L2 system. In discussing this same issue, Garrett (1986) referred to the importance of 'process rules'. Garrett argued that explicit grammatical teaching can be made meaningful if one considers how form is related to meaning, and the specific meaning that is associated with particular forms. Garrett noted that there is a continuum along which awareness of and attention to form will vary from cases where form may be totally redundant to instances where form may be essential to meaning. In this regard, it is important to make students aware of the different roles that form may play – prepositional, basic grammatical relationships, or sociolinguistic (degree of formality). Clearly, to fully appreciate and understand the various functions that different language forms may serve, students must be provided opportunities to engage in extended discourse in a wide variety of situational contexts. As Allen et al (1990) note, one way to promote this is through group work. In a grade 6 French immersion class that the present researcher taught, this was realized through the planning, writing, and production of a news program. Not only were students be involved in meaningful content, but they had to produce a polished final product – an excellent opportunity for focused language output. Editing of the written text was done by the individual first, then by a peer and finally by the teacher. The use of video cameras to record the 'trial runs' allowed students to analyze their oral production in the L2 and make any necessary changes before recording the final product.

Besse (1986) suggested that the students own production in the L2 is the best corpus that one could use for analysis. By using the students' own language, one creates a corpus which is related to the intuitions of the students and which reflects their interlanguage rules. Sentences could be divided into two groups – grammatically correct and grammatically incorrect. Students should then be encouraged to reflect upon the difference between the two groups; that is, to engage in conscious metalinguistic reflection. Besse (1986, p.29) maintained that it is not the direct transmission of grammatical knowledge on the part of the teacher which matters, but rather the integration of this knowledge into problem solving activities which require re-interpretation of that knowledge in function of the conditions and objectives unique to the L2 classroom:

> il s'agit simplement de permettre aux étudiants de s'expliciter eux-mêmes la conceptualisation qu'ils se font du fonctionnement de la langue qu'ils sont en train d'acquérir. Ils élaborent alors leur propre description grammaticale (transitoire et révisable)

The results of the present study indicate that the students in these FI programs could have benefited, in part, from more written practice identifying and correctly forming basic French verb tenses. The nature of such practice is an extremely important aspect of this issue. Practice should be provided using contextualized activities where students are required to focus upon language form while understanding meaningful extended texts, as opposed to simply manipulating isolated sentences or mechanical exercises requiring verb tense formation. An activity similar to the **Rational Cloze** test used in this study, which involves a focus on language form within a larger thematic context of an integrated passage reflecting a specific topic, theme, or unit of study, would fulfill these requirements. This sort of activity has the added advantage of allowing teachers to the select those verb tenses and lexical content which the students need to practice. The level of difficulty of the task could be adjusted by the number of verbs and verb tenses involved, by providing alternative responses in parentheses in place of the infinitive, or by allowing students to work in small groups to come up with the best response in each case. In correcting such an exercise, it would be important to ask students to justify their reasons for various responses, and to highlight the importance of sentence-level, linguistic clues as well as situational clues taken from elsewhere in the passage.

In summary, it is clear from the results of this study that a combination of analytic and experiential strategies are crucial if students are to achieve anything like native-like mastery in French immersion programs.

Implicational Scaling and Interlanguage Analysis

Certain researchers have found evidence for a specific order of accuracy of grammatical morphemes. This order was found in naturalistic L2 learning situations where learners had learned the L2 through a focus on the message (Dulay & Burt, 1973,1974; Bailey, Madden & Krashen, 1974) or in instructional settings (Fathman, 1975). In all cases this order of accuracy was perceived to be 'natural' – like that of the learners' L1. Other researchers, however, found that in instructional L2 settings, this order of accuracy differed considerably as a result of one or more of those factors discussed above (Larsen-Freeman, 1976; Lightbown, 1983; Hamayan & Tucker, 1980).

While an order of acquisition was sometimes inferred from an order of accuracy of use (e.g., Dulay & Burt, 1973), it is generally felt today that a specific order of acquisition is difficult to demonstrate, and would vary greatly from one individual to another. Consequently, a more general sequence of development which all learners pass through has been proposed (Ellis, 1986). This developmental sequence is seen to be evidence of students' underlying language competence and not merely a reflection of performance factors such as fatigue, inattention, and so on.

The results of the present study lend support to the notion of a general developmental sequence for SLA. While the precise order of accuracy regarding specific grammatical morphemes may vary from one group to another, there is a discernible pattern of development that emerges. This pattern involves students' written verb tense development of the *passé composé* and the *imparfait* including typical patterns of errors. This information is potentially quite useful to teachers and others interested in diagnostic assessment of students' written verb tense use. It is also important for understanding the process of acquisition of these complex verb forms as it occurs during the middle school years from grade 6 to grade 8.

The finding, for example, regarding use of the *passé composé*, that students tended to use the infinitive or the present tense in place of the past participle as an earlier strategy, and then resorted to an over generalization of the *é* ending, may provide useful information to teachers who wish to correct these difficulties. Similarly, concerning the *imparfait*, it was noted that students followed a three step progression: homophonous spellings including present tense forms (e.g., *avez* for *avait*); past participle forms (e.g. *été* for *était*), and finally, errors of person and number (e.g., *regardais* for *regardait*). It was also noted that students accurate use of the *imparfait* was restricted to stative verbs until grade 8 EFI. If future research into developmental sequences in French immersion supports these findings, teachers could be provided with a general pattern that may be helpful in determining which problems to focus upon at a particularly time. Clearly, further studies and analysis are required to provide more specific information in these areas.

Conclusion

The empirical evidence presented in this study contributes to an understanding of both the rate and the route of SLA in different FI contexts. Regarding the rate of acquisition, it was demonstrated that students in later starting programs are able, in certain cases, to catch up to peers in earlier starting programs on a more analytic, written task. Students in LFI and to a lesser extent in MFI appear to demonstrate a more rapid rate of acquisition on this task than on the more message-focused, oral task. The finding that the type of assessment task may differentially influence students' performance in different FI programs is one that should be examined more closely. The difference between oral and written tasks, for example, both in terms of difficulty and types of language knowledge and skills required is one aspect that merits further investigation.

This study is also important for the information it provides on the students chosen from the MFI program in particular. As noted at the outset, MFI is the most recent and least well known variant of FI. These findings situate the performance of students in MFI at a level between that of EFI and LFI. In one case the performance of MFI and LFI students is similar, and in two cases MFI and EFI students perform similarly. In general, however, by the end of grade 8, the students' results in LFI do not compare to those of students in the MFI program. The findings suggest that the grade 4 entry point in MFI provides an advantage over the grade 6 entry point in LFI.

Regarding the route of acquisition, the results of this study provide useful information on developmental sequences for the *passé composé* and the *imparfait*. As noted earlier, no known information about developmental sequences for these two verb tense aspects in French was previously available. The interlanguage analysis of students' written responses on the **Rational Cloze** test represents a first attempt to infer patterns of development for the *passé composé* and *imparfait*. Clearly, the suggested developmental sequence is a preliminary step and a much more detailed examination of these verb aspects is required before definite claims may be made.

The limitations of this research are also important to point out. The restricted number of classroom observations and the difficulties inherent in observing alone must be acknowledged. While total numbers of students were large, the grouping by program, grade, and classroom placed restrictions on the sample allowing for a teacher effect or particular group dynamics to influence results. While the **Rational Cloze** and **Elicited Imitation** tests appeared to function well during field testing trials, the former turned out to be more difficult than originally expected. The difficulty of this test, in particular, may have produced results which were not anticipated. The interruption in the testing schedule do to an unexpected teachers' strike in the spring caused some data to be collected in the fall of the following year. This meant that results for some grade 7 students were combined with those of grade 6 students. In short, the limitations of this classroom-based research study are readily admitted. However, while these factors may produce rather tentative conclusions in some cases, they also contribute to the richness of the experience. Research of this nature is highly complex.

Indeed, as stated in the introduction, the entire issue of SLA is extremely complicated and cannot be explained by simplified, one-sided positions. Age, as has been demonstrated, is one variable along with many others that one must consider in attempting to better understand this complex human phenomenon. This research was designed to build upon previous knowledge and to examine questions to which definite answers are clearly impossible given the current state of knowledge and understanding in the field of SLA. It is hoped, therefore, that future researchers will continue to examine the relative importance of such factors as starting age, cognitive maturity, first language literacy, amount and intensity of exposure to the L2, classroom instructional approaches, and the types of tasks involved in the assessment process.

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Appendix A

Elicited Imitation Test and Verb List

LE CAMP IDÉAL

Phrases à répéter

1. Bonjour! Je **m'appelle** Sylvie et je **suis** francophone.
2. Ma meilleure amie qui **s'appelle** Lynn, elle **est** anglophone.
3. Nous **avons** toujours **été** des amies inséparables.
4. Mais, l'année dernière, tout cela **a changé**.
5. On **s'est** pas **amusé** du tout l'été passé.
6. Moi, je **suis allée** à un camp d'été pour francophones.
7. Lynn, elle **est allée** à un camp pour anglophones.
8. Et pourquoi? Parce que nos parents **ont insisté**.
9. Lynn **prend** des cours en français à l'école, et moi, en anglais.
10. Mes parents me **disent** que je **dois** pratiquer mon anglais.
11. Les parents de Lynn **veulent** qu'elle **parle** français en été.
12. Nous **avons** tout **fait** pour convaincre nos parents.
13. Nous **avons épuisé** tous les arguments que nous **avions**.
14. Rien ne **marchait**, nos parents **étaient** inflexibles.
15. Nous **étions** désespérées. La vie nous **semblait** triste.
16. Puis, j'**ai entendu** parler d'un nouveau camp d'été!
17. Nos parents **seront** très content de cette solution:
18. Je **parlerai** anglais et Lynn **apprendra** le français.
19. Mais, nous **irons** ensemble au *Camp idéal*.
20. **As**-tu **deviné**? Il **s'agit** d'un camp d'été bilingue!

LIST OF VERBS AND VERB TENSES FOR THE ELICITED IMITATION TEST

Présent (11) – Passé Composé (10) – Imparfait (5) – Futur (4) = Total: (30)

Infinitive	**Form to Repeat**	**Tense**	**Regular / Irregular**	**Other**
s'appeler	m'appelle	présent	regular	pronominal
être	suis	présent	irregular	
s'appeler	s'appelle	présent	regular	pronominal
être	est	présent	irregular	
faire	faisons	présent	irregular	
prendre	prend	présent	irregular	
dire	disent	présent	irregular	
devoir	dois	présent	irregular	
vouloir	veulent	présent	irregular	
parler	parle	présent	regular	
s'agir	s'agit	présent	regular	pronominal/impersonal
être	avons été	p.c.	irregular	
changer	a changé	p.c.	regular	
s'amuser	s'est amusé	p.c.	regular	pronominal
aller	suis allée	p.c.	regular	être auxiliary
insister	ont insisté	p.c.	regular	
faire	avons fait	p.c.	irregular	
épuiser	avons épuisé	p.c.	regular	
entendre	ai entendu	p.c.	regular	
deviner	as deviné	p.c.	regular	
avoir	avions	imparfait	regular	
marcher	marchait	imparfait	regular	
être	étaient	imparfait	irregular	
être	étions	imparfait	irregular	
sembler	semblait	imparfait	regular	
être	seront	futur	irregular	
parler	parlerai	futur	regular	
apprendre	apprendra	futur	regular	
aller	irons	futur	irregular	

Appendix B

Rational Cloze Test and Verb List

L'INTELLIGENCE — UN TRAIT HUMAIN?

Le castor est un mammifère qui pèse entre 15 et 35 kilogrammes. Il est végétarien et sa vie (durer)[1] __________ environ 12 ans. Mais est-il un animal intelligent, le castor? Après avoir lu l'histoire suivante, tu (pouvoir)[2] __________ répondre à cette question.

Je (s'appeler)[3] __________ Jean, et j'ai deux bons amis, Paul et Marc. Chaque été, nous faisons du camping en forêt. Nous (choisir)[4] __________ toujours le même endroit pour planter notre tente — un terrain plat le long d'un ruisseau large et assez profond. Pas loin de cet endroit, se trouve un barrage où (habiter)[5] __________ une colonie de castors. Chaque matin, plusieurs membres de cette colonie (prendre)[6] __________ un bain dans le ruisseau devant notre tente. Ils (s'arrêter)[7] __________ souvent pour nous observer mais (quitter)[8] __________ la place à notre approche.

Cependant, l'été dernier, quelque chose de très intéressant (arriver)[9] __________. Lorsque nous sortions de la tente chaque matin, il y avait toujours un castor qui nous (attendre)[10] __________ pour dire bonjour. Nous (décider)[11] __________ de nommer ce castor «Louis».

Un jour, Paul et Marc sont partis chercher un endroit pour traverser le ruisseau à pied. Je les (attendre)[12] __________ pendant deux heures. Finalement, Paul (rentrer)[13] __________ sans avoir traversé mais, Marc, lui, (être)[14] __________ dans l'eau jusqu'aux genoux. Nous (descendre)[15]

__________ au ruisseau pour voir s'il (avoir)[16] __________ besoin d'aide. Marc (se trouver)[17] __________ au milieu du courant quand, tout d'un coup, il (perdre)[18] __________ l'équilibre. Il (finir)[19] __________ par arriver à la rive sans autre incident, mais il était très embarrassé quand il (voir)[20] __________ Paul, moi, et surtout Louis qui le (regarder)[21] __________ d'un air moqueur.

À la nuit tombante, nous (être)[22] __________ bien fatigués. Puis, Paul (avoir)[23] __________ une excellente idée: «Demain, nous (trouver)[24] __________ deux arbres assez longs pour former une passerelle. Je les (abbatre)[25] __________. Jean, tu les (placer)[26] __________ à travers du ruisseau. Et, Marc (franchir)[27] __________ la passerelle sans tomber à l'eau!»

Quand je (sortir)[28] __________ de la tente le lendemain matin, je ne pouvais pas en croire mes yeux. Pendant la nuit, Louis avait choisi deux arbres bien placés, et les avait laissé tomber à travers du ruisseau. Louis (trouver)[29] __________ la solution à notre problème.

Aujourd'hui encore, nous (garder)[30] __________ de ce brave castor un souvenir très agréable. Probablement, nous ne l'(oublier)[31] __________ jamais. Je (se demander)[32] __________ pourtant si Louis (se souvenir)[33] __________ de nous – ces trois campeurs qui (faire)[34] __________ preuve de l'ignorance des êtres humains.

LIST OF VERBS AND VERB TENSES FOR THE RATIONAL CLOZE TEST

Présent (10) – Passé Composé (10) – Imparfait (6) – Futur (6) = Total: (32)

Infinitive	**Expected Form**	**Tense**	**Regular / Irregular**	**Other**
durer	dure	présent	regular	
s'appeler	m'appelle	présent	regular	pronominal
choisir	choisissons	présent	irregular	
habiter	habite	présent	regular	
prendre	prennent	présent	irregular	
s'arrêter	s'arrêtent	présent	regular	pronominal
quitter	quittent	présent	regular	
garder	gardons	présent	regular	
se demander	me demande	présent	regular	
se souvenir	se souvient	présent	irregular	
arriver	est arrivé	passé composé	regular	être auxiliary
décider	avons décidé	passé composé	regular	
attendre	ai attendus	passé composé	regular	agreement
rentrer	est rentré	passé composé	regular	être auxiliary
descendre	sommes descendus	passé composé	regular	être auxiliary
perdre	a perdu	passé composé	regular	
finir	a fini	passé composé	regular	
voir	a vu	passé composé	irregular	
avoir	a eu	passé composé	irregular	
sortir	suis sorti	passé composé	regular	être auxiliary
faire	**ont fait**	**passé composé**	**irregular***	
attendre	attendait	imparfait	regular	
avoir	avait	imparfait	regular	
être	était	imparfait	irregular	
se trouver	se trouvait	imparfait	regular	pronominal
regarder	regardaient	imparfait	regular	
être	étions	imparfait	irregular	
pouvoir	pourras	futur	irregular	
trouver	trouverons/allons trouver	futur	regular	
abattre	abattrai/vais abattre	futur	regular	
placer	placeras/vas placer	futur	regular	
franchir	franchira/va franchir	futur	regular	
oublier	oublierons	futur	regular	
trouver	**avait trouvé**	**plus-que-parfait**	**regular***	

* Faire (passé composé) and trouver (plus-que-parfait) were not included in the statistical analysis of results.

Appendix C

Laboratory Testing Directions

1. **Expliquer brièvement les tests et mettre les élèves à l'aise.**
    - il y a deux tests: un test oral et un test écrit
    - le test oral est un test de répétition de phrases
    - le test écrit est un test de vides à remplir

2. **Demander aux élèves de**
    - sortir la cassette de la boîte
    - écrire leurs noms (prénom et nom de famille) ainsi que le nom de leur école sur le bon côté de la cassette
    - bien placer les cassettes dans les machines
    - mettre les écouteurs et descendre les micros

3. **Le test oral.**

• RMS-8 → REC [NOT PLAY + REC] .

J: Bonjour!/ Bienvenue à l'Université d'Ottawa./ Dans quelques minutes/ tu auras des exercises à faire/ mais avant de commencer/ on va écouter une chanson.../

• ARRÊTEZ LA CASSETTE ET ASSUREZ-VOUS QUE LES MACHINES MARCHENT BIEN

REC: [...Chanson...] 3 mins. 20 secs.

J: Bientôt/ tu vas réptéter quelques phrases difficiles./ Ne t'inquiète pas./ Cet exercise ne compte pas./ On te donne la chance de pratiquer un peu/ et de t'amuser./ Après chaque phrase/ tu vas entendre un signal [...]/ Lorsque tu entends ce signal, répète la phrase./ Maintenant, répète les phrases suivantes:

[Une pause de 10 secondes après chaque phrase]

C: 1. Ce poisson n'est pas du poison.
2. Trois tristes tortues sur trois toits gris.
3. Un bon chasseur doit savoir chasser sans chien.
4. Jérôme et Jean arrosent et rasent la pelouse. [1 minute]

J: Bravo! Bientôt/ tu vas entendre une jeune fille/ qui raconte son histoire "Le Camp Idéal"/ à la radio francophone des jeunes./ Cette histoire/ a gagné le premier prix d'un concours/ dont le but/ était de faire la publicité/ d'un nouveau camp d'été./

Voici maintenant Sylvie Thérien/ qui présente son histoire à la radio./ Écoute bien./ Après avoir entendu l'histoire,/ on va te demander de répéter quelques phrases./

MUSIQUE RADIOPHONIQUE

[Le Camp Idéal] 1 min. 30 secs.

4. **• – Arrête la cassette.**

- Explique aux élèves qu'ils doivent s'identifier sur la cassette, et que le test va commencer.
- **Appuie sur REC + PLAY (>)**

Maintenant/ on commence./ J'aimerais d'abord/ que tu me dises ton nom./

[...] 5 secs.

5. **– • Vérifie que les élèves s'identifient sur la cassette.**

Merci. Avant de commencer/ faisons un exemple. Répète la phrase suivante après le signal.

Exemple: Je suis à l'Université d'Ottawa. [signal] (pause de 10 secs.)

Très bien. Le test commence. Répète les phrases suivantes.

[21 phrases... pause de 10 secs. après chaque phrase] 5 mins.

Merci. C'est la fin de la première partie du test.

6. **• – Arrête la cassette.**

Explique aux élèves qu'ils auront une courte récréation de 3-5 minutes. Ils quitteront la salle seulement si c'est nécessaire.

7. **Deuxième Partie – Le Test Écrit**

"L'Intelligence – Un Trait Humain"

- Distribue les tests écrits.
- Explique aux élèves qu'ils doivent lire toute l'histoire avant de commencer à mettre des réponses.
- Le test durera 30-35 minutes.

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Le présent ouvrage examine l'influence de facteurs tels qu'âge d'entrée, intensité et durée de programmes, et approches pédagogiques sur l'acquisition du système verbal dans les programmes de français par immersion.